THE

WESTERN JOURNAL

OF

MEDICINE AND SURGERY.

JUNE, 1850.

ART. I.—*Epidemic Puerperal Peritonitis.* Reported by WM. KENNEY, M. D., of Millersburg, Ky.

The panic of the epidemic of summer had passed—the public mind to tranquillity had been restored, and disease once more seemed to have passed away from our midst—autumn,

> "Crown'd with the sickle and the wheaten sheaf,
> ——————— nodding o'er the yellow plain,
> Comes jovial on,"

when a respite from the arduous and responsible duties of the profession, from the calm succeeding the storm, we hoped was in store for us. But before the winter,

> ——————— "in sable cincture, shadows vast,
> Deep-tinged and damp,"

sets fairly in, the energies and benevolent purposes of the medical profession were again brought into requisition, by an epidemic, to administer unto the maternal portion

of our community who had not, as yet, commenced the ordeal of a parturient female, or had scarcely finished the throes that nature in child-birth entails before they had visited upon them the prodromes of epidemic puerperal peritonitis, the declaration of which was soon in formidable array before us.

This truly Protean disease commenced its ravages in the latter part of November, continuing through December and January, carrying terror with it. But before entering fully into the consideration of the subject of our undertaking we will premise, and hope not without additional interest—a more detailed account of the disease by a reference to the epidemic of preceding years as has been noticed, in some of the works extant on diseases of females, from Hyppocrates down, (but to Dr. Denman, says a writer, the profession is indebted for the first distinct essay on Epidemic Puerperal Fever,) and in each year of its prevalence, though confined principally to populous cities, and the wards of lying-in hospitals, it has been marked by great fatality.

A gentleman writing about 1761, states that all women delivered by him in a lying-in hospital in London, died during the prevalence of the disease.

Dr. Leake, in his work on diseases of women, says: "That from December 13, 1768, to December 12, 1769, 180 women died. From December 12, 1769, to December 11, 1770, 270 women died. From December 11, 1770, to December 10, 1771, 172 women died."

Dr. Wm. Hunter says: "That of thirty-two patients who were attacked with the disease during two months, only one recovered. Various plans of treatment were put into execution—venesection, cooling medicines, cordials and stimuli."

Professor Young, of Edinburg, says: "In 1773, puerperal fever appeared in the lying-in ward of the Royal Infirmary, about the end of February, when almost every

woman as soon, or within twenty-four hours after delivery was seized with it and died, though every method was used to cure the disorder."

Dr. Dewees, of Philadelphia, in his work on Diseases of Females, 1827, says: "This disease very rarely presents itself as an epidemic in this country, and the only record of the kind recollected by him was that of Dr. Jackson, when it prevailed in part of Pennsylvania, in the fall of 1817, and the spring of 1818, and though treated with both vigour and ability, about one half died."

Other and more or less favorable accounts have been given of the prevalence of this disease down to 1842, by various writers coincident with the prevalence of epidemic typhus fever, or erysipelatus inflammation, but no other forms of disease, save catarrhal affections common to the season, were present during the prevalence of that which forms the subject of this report, and the most of those attacked trace the commencement of their afflictions back to the prevalence of epidemic cholera in August and September, from which time they say they have not known a well day.

Though our field of observation was confined to that of a country village, where the cases were not so numerous as would have been during an epidemic of the kind in the wards of a lying-in hospital in a populous city, yet the loss was equally as severely felt, and the fatality as great in proportion. But nothing, however, occurred to support the opinion of the contagious character of the disease, contended for by some writers, farther than the fact mentioned by Dr. Condie, of Philadelphia, who says: "How otherwise can be explained the circumstances of the disease, in one district, being exclusively confined to the practice of a single physician, extensively engaged in obstetrical practice, while no instance of the disease has occurred in the patients under the care of any other accoucheur practising within the same district."

The majority attacked were of a delicate conformation with the scrofulous diathesis—more or less predominating, and varying from twenty to thirty-six years of age—occupying elevated positions in society, and blessed with an abundant means of comfort.

Abortions after the first month or six weeks of gestation, and premature labor, were occasionally to be met with during these months, and the majority of those attacked expressed themselves as not "looking" for some time yet, while others confined nearest the full term gave birth to children that to all appearance had been dead for days or weeks. Some again coming into the world, as supposed at maturity, presented for the first few days a promise to do well, but finally become jaundiced, and declined or wasted away as if with marasmus.

The labors in no instance, that we recollect, differed from ordinary labor of other seasons as to time, hemorrage or suffering.

The character of the disease that occured here, to a great extent, corresponded with that given to an epidemic, in some of the books as occurring in London, at Aberdeen, Leeds, Edinburg, and Dublin, with the addition of its adynamic or typhoid form. It appeared to effect primarily the peritoneal surfaces covering the uterus, and radiating from that point to other parts. The attack may be said, in some instances, to have taken place several days before, but in the majority of cases about the third or fourth day after confinement. The earliest symptoms denoting an abnormal condition of the system, predominating over that state of malaise the patient for some time had been accustomed to, were slight rigours, pain in the head and back, numbness of the extremities, acceleration of the pulse, flushing of the face, and increase of heat of surface, more or less abdominal pain and tenderness with internal heat and burning, diarrhea, with tormina and tenesmus.

Abdominal pain, heat, and burning, tormina, and tenesmus, diarrhea, or frequent and unavailing efforts at stool, with an occasional discharge of a little transparent mucous or muco-feculent matter, were the precursory symptoms of disease in those attacked before confinement.

The chill which rarely ever amounted to shivering, consisted rather of a sense of coldness on change of position, and was followed by flushing of one or both cheeks, increase of heat of surface and of thirst, burning of the palms of the hand and soles of the feet. The heat of surface soon subsided, followed by more or less partial perspiration, and rarely ever did it afterwards transcend the natural temperature of the body. The pulse attained one hundred and twenty beats per minute, small soft and compressible, generally, with a greater tendency to increased than diminished frequency.

Gastric irritability soon manifested itself as did bronchial irritation, with increased secretion of mucous of a semi-transparent or muco-purulent character; and in one instance the original disease was entirely lost sight of, and the patient carried off by ulceration of the mucous surfaces of the bronchia from deposition of tubercular matter, though the cough and bronchial secretion mostly, after a few days, became less harassing, and measurably subsided. The nausea and vomiting were truly obstinate and distressing, from the succussion it produced, and continued throughout the disease subject to occasional remissions and exacerbations. The matter vomited varied in character from a frothy saliva to transparent mucous, mucous of a tenacious and deep saffron-like color, and towards the termination in fatal cases the matter ejected became of a dark vitiated-like billiary matter.

Increased sensibility of the abdomen on pressure was early developed in the disease, confined at first to the hypogastric or iliac regions, and rather of a subacute and burning or aching character, as described by patients,

that gradually extended itself over the abdomen, subject, occasionally, to modifications, but never at any time entirely subsiding. Nor do we recollect of the pain becoming sharp, except preceding an operation, or after a paroxysmal attack, nor was the abdomen so tender as to not permit of the weight of an ordinary amount of bed-clothing, in addition to the fomenting cloths and bran poultices. Nor was there any great disposition on the part of the patient to keep the knees drawn up, but most generally the patient laid on the back, with the head slightly raised, with an inclination to slip down towards the foot of the bed, except late in the disease when, from restlessness, there would be desire for a change of position for a time, on either side.

The enlarged uterus, in the majority of cases, could be felt through the integuments above the symphisis pubis, and more than probably a dip of the inflammatory action, in some instances, may have taken place into the proper tissue of that organ, as was found to be the case, as is reported by M. Duges and M. Lonnelle, in patients examined by them.

A tumid and tympanitic state of the abdomen was one of the earliest symptoms recognised on being called to a patient. The abdomen presented a smooth polished surface, with the convolutions of the inflated bowels, in the thniner subjects, readily detected by the eye.

The lochia varied, in some it was entirely suppressed, in others for a time only. In some it underwent no change, while again you would find patients for the first few days, at intervals, as if by an expulsive effort of the uterus, discharging semi-coagulated masses of blood; and several of my patients expressed themselves as having felt an escape of gas from the womb. The vaginal mucous membrane was hot and congested, with frequently a more or less offensive muco-sanguineous discharge.

The secretion of milk was invariably suspended, and

the mammary gland became perfectly flaccid, while the mother evinced no very great interest in the child.

The action of the heart, upon auscultation, emitted rather a feeble sound, and the pulse was one hundred and twenty strokes to the minute, increasing from one hundred and forty to one hundred and sixty, towards the close in fatal cases.

The tongue varied from a healthy appearance to a slight, thin, light colored coating, or a dark brown, dry in the center, and again you would find it with a red edge and tip, or of a deep, glossy, red color.

The thirst, after the first twenty-four or forty-eight hours, was not very remarkable, and drinks, when called for, were taken but sparingly.

Diarrhea was a constant accompaniment in the early part of the disease, and might be said, in many cases, throughout it, and in excess, yielding readily to no therapeutical means whatever. Relaxation of the sphincter ani, and involuntary discharges at an early period in the disease, were occasionally observed, and the diarrhea, instead of exerting a benign influence by its depletory action, as is supposed by some, resulted quite to the contrary. In some cases, after a time, the bowels yielded more kindly to the action of medicinal means, and the secretions acquired a more healthy character and consistence; coeval with which there was an improvement in the abdominal symptoms, in the state of the skin, and in the expression of the patient, without alteration in the force and frequency of the pulse. This condition formed a delusive truce, in the course of the disease, that was soon dissipated by the return of diarrhea, the precursor of renewed inflammation of a more acute character, acting, perhaps, on a more limited area, from the locality of the pain, and tenderness on pressure, which, at this stage of the patient's strength, lessened greatly the chances in their favor.

The dejections varied in consistence and character,

presenting, in the commencement, something of a mucofeculent character, succeeded by a more copious discharge of a cider-like nature, with a filmy, curdled matter suspended in it, that was ultimately, in the last few days of life, followed by thin, watery evacuations of a dark-green or copperas-like color, extremely offensive, and attended with burning and scalding pain, giving an increased amount of tormina and tenesmus.

The urine, in concatenating the history of the morbid secretions of the system in this disease, was found diminished in quantity, and varied from a healthy to a turbid and deep ley-like color, with a cloud of mucus floating through it; and cases were not wanting in which there was a partial suppression and retention, that required, for days, the use of the catheter. Its acrid qualities, too, were equally manifest from the expression of the patient in micturition, during the course of the disease, and gave reason to believe it, in some instances, the cause of retention.

The heat of surface, as has been before noticed, was not very marked after the first day or two, and the perspiration that frequently followed, presented nothing abnormal as to smell, but seemed partial in its appearance, and as life began to show the doubtful tenure by which it was held, the extremities became cold. Petechia presented occasionally; and, in all of the fatal cases, sudamina were abundant on the upper part of the chest, both posteriorly and anteriorly.

The intellectual faculties, in one or two instances, became disordered early in the disease, and finally in all.—The delirium was of a low muttering kind, and strange fancies possessed some of them, so much so as to give it almost a monomaniacal character. The chiming of bells in the distance, the music of a choir, or a buzzing noise in the ears of patients were frequently a source of annoyance to them.

The contour of the face was very little altered, save by emaciation, and nothing of the "face grippe" which is spoken of in the books was noticed. The color was rather pale or sallow, with an occasional flush of one or both cheeks. Emaciation was more shown on the body and extremities than about the face. The expression of the eye rather vacant and unmeaning; a picking at the fingers and of the lips and nose, and a constant disposition was remarked, in the more protracted cases, to adjust the bed-clothing.

Sleep was short and disturbed, the appetite failed, and the irritability of the stomach increased, so as to reject the blandest fluids. There was hiccough, and a great disposition to syncope on assuming the erect position.

In nearly all cases, the disease was of a subacute character, or a tendency to that form of inflammation, and its duration was from days to weeks.

Occurring, as this disease did, in private practice, the possibility of pursuing its study by postmortem examination was precluded, but it was evident that there was peritoneal inflammation, thickening and more or less effusion, with inflammation of the peritoneal surfaces of other of the abdominal organs, occasionally, from the location and deeper-seated pain and tenderness.

About two-thirds confined were attacked, and under whatever therapeutical means were employed three-fourths of the cases, that presented themselves, terminated fatally.

It had never before been our misfortune to meet with an epidemic of the kind, and we find in this some difference from the usual symptomatology as regards the pulse, pain, delirium, position, diarrhea, the tolerance of remedies, acuteness of the patient's sufferings, tenderness, and the state of the secretions. The malignancy differed from that of sporadic puerperal peritonitis, and from what we learn from reports, of its greater extent of mortality.

The plan of treatment found most available, in this in-

stance, consisted in fomentations; bran poultices; epispastics; free sponging with tepid water the body and extremities; mercurial frictions, as recommended by Armstrong, Vandnesand, and Velpeau; infusions of rhei and geranium maculatum, with laudanum; anodyne and astringent enemata; vaginal injections of warm milk and water; mucilaginous drinks; and stimulants, with attention to cleanliness, quietude, and diet.

Bleeding was but rarely resorted to, and then badly borne. Mercury alone, or combined with opiates in cathartic or alterative doses, rather aggravated the condition of the patient, by increasing the tympany and irritability of the bowels.

Art. II.—*A Sudden and Fatal Case of Purpura.* By Napoleon B. Anderson, M. D., of Louisville, Ky.

The case was that of a boy, Calmore Brown, æt. 9 years, born and raised in this city; free from predisposition to hereditary diseases. He had, previous to the present attack, been a robust, healthy lad; complexion fair; countenance expressive and intelligent; he had symmetry of body, with large and well developed chest.

On February 2d, he commenced expectorating a thick, tough, white, saline sputa, of which no notice was taken, as in other respects he was entirely well. On the 11th, he was attacked with a slight chill, which appeared to centre in the spine. This soon passed off, followed by a high fever; flushed face; pulse one hundred and forty; respiration quick, laborious and hurried, with natural sounds of both lungs; tongue coated, and red at edges and tip; fauces swollen, and of a dark color; the coats of the eyes natural, pupils dilated, and sensible to light. He complained of no pain, with the exception of an uneasiness over the orbits; bowels costive. Ordered hydrarg.

proto-chloride, grs. x., pulv. rhei, grs. iv., jalap. grs. v., made into two powders—one immediately administered, and the second in two hours, followed by oil ricini.

Feb. 12th, 8. A. M.—He has had three free evacuations from the bowels, of a dark, frothy character,—pain over the ileo-cecal valve; urine red, and depositing a brick dust sediment; fever abated; pulse eighty and feeble; tongue darker; pupils contracted and insensible to light; cold perspiration on arms and head; deathly pallor; delirious at times, but sane at intervals; movement of any of the extremities gave excruciating pain; the face, arms, hands, legs and feet were covered with purpuric patches, varying in size from a split pea to that of a dollar. Ordered warm mustard bath, with a desert-spoonful of the following mixture every two hours, in addition to warm brandy toddy and rich chicken soup:

℞. Mucilaginous acacia, ℥iij.,
Carb. ammonia, ℥i.,
Sulph. quinia, grs. xx.,
Aromatic sulphuric acid, q. s.

Misce.

The mouth and tongue were cleansed with fresh lime juice.

12th. 5, P. M.—Delerious, incessantly calling the name of his school teachers, and in trying to fight his play-fellows. Pulse, seventy, and becoming more feeble—pupils still contracted—tonsils same—tongue red at edges, and the surface covered with innumerable red elevated papilla—sordes on the teeth—cold perspiration—hands, arms, feet, and legs cold—cough for the first time appears—expectoration thick and dark—slight congestion of the lungs—the hemorrhagic spots fast increasing in size and number—legs and arms extremely painful—the uneasiness over the cecal valve increasing. Ordered same treatment—repetition of the bath; warm turpentine over the cecum—enema of tepid flaxseed tea ℥ss., oil terebin-

thina 3ss., tinct. opii. gtts. xxx, in two equal parts, to be administered half hour apart.

He died at 12 o'clock same night.

13th. 9, A. M.—Post mortem objected to. Whole surface of the body ecchymosed, with exudations of bloody mucous from the mouth and nostrils.

Remarks.—This case presents itself to my mind as one of genuine *purpura* or *purples*, which, incorrectly, have been ranked among cutaneous diseases. Its external phenomena are such as to show conclusively that it is a hemorrhage; as pressure upon the spots does not efface the color, nor render it fainter, as it does that of inflammation of the skin. The hemorrhage takes the form of red or purple spots, when the quantity of blood extravasated in the same place is only a drop—and there is scarcely ever any prominence of the purple stigmata—they are livid blotches in appearance exactly resembling bruises—in fact, the anatomical condition of bruises and purpura is the same, changing from red to a greenish yellow—both the result of ecchymosis.

The profession is divided in opinion as regards the true cause of purpura, which difference has given rise to diversified theories. The author is of opinion that the disease is secondary, so far as it develops itself upon the skin—a result of a diseased state of the veins—a softening and breaking down of the different coatings of the entire nervous system—and that the ecchymosis is the result of an exudation of venous blood, with its extravasation into the whole cellular tissue, through the softened structures of the veins. Ecchymosis is seen on the mucous surface of the mouth, the throat, the stomach, the intestines, on the pericardium, pleura, and peritoneal investment of the abdominal organs, in the muscles, on the membranes of the brain, and even on the sheaths of the nerves; and with large extravasations of blood in the most vital organs of the body. Is not purpura, therefore, a

disease of the structure of the veins or arteries, or of both, with a contaminating quality existing in the blood, tending in the onset to disorganise their structure? I am of opinion, that taken as a whole, purpura is the result. This, however, is a mere hypothesis, an opinion respectfully expressed.

ART. III.—*A Case of extensive Fracture of the Skull and rupture of the meninges, with loss of substance of the brain, and subsequent recovery.* By JOHN SWAIN, M. D., of Ballardsville, Ky.

On the morning of the 13th of October, 1848, after early breakfast, David Forbis, aged 12 years, was found in a pasture, with his skull fractured, by a kick from a horse. Owing to the distance of all medical aid, and to avail themselves of certain necessary surgical assistance, the friends dispatched three messengers, one for Dr. Drane, of New Castle, another for Dr. Baker, of Shelby county, and a third for myself.

I saw the case in one hour and a half after the injury, and was immediately joined by Dr. Baker. We found the patient lying quiet; complained of a little pain; appeared perfectly rational, and answered all questions satisfactorily. His pulse and respiration slow, weak, and irregular; hands and feet cold. We gave him some warm toddy, and applied warmth to his feet. Shortly after taking the toddy he vomited his breakfast, unassimilated, together with a considerable quantity of blood, which had passed from the wound by the posterior nares and the esophagus, to the stomach.

At 10 A. M., we were joined by Dr. Drane, and upon consultation, after a superficial examination, decided, without dissent, that there was but little hope for recovery; but for our own credit, and that of the profession and the satisfaction of the friends, it became our

duty to treat the case as we would have treated it, had it presented the most flattering features.

The pulse had now improved a little, yet it could not be said there was positive reaction. We proceeded to make a more particular examination, and to dress the wound.

The blow covered the os frontis and the nasal bones, crushing the former, depressing the latter, separating the head from the face, and, making an external wound, reaching from the outer angle of the right eye, to the lesser cánthus of the left, sufficiently open to admit the passage of the finger behind the ball of either eye.

A portion of the frontal bone of the left side, which is by measurement one inch by one and a half, on its frontal face, including the orbitar arch, and a portion of the orbitar plate, one inch by four lines upon its orbitar surface, was detached from the surrounding tissues, and buried completely in the substance of the brain, displacing about a tablespoonful of the cerebral substance, which, was lost in dressing. Smaller portions of the supra orbitar arch of the right side were raised and removed. The lips of the wound were now drawn together by the interrupted suture, dressed with lint, a compress and common roller.

The examination did not change our opinion first expressed; but confirmed the impression of a fatal termination.

The dressing being accomplished, the patient said he felt quite comfortable. Twice, during the evening, he vomited considerable quantities of blood.

7 P. M. Pulse seventy, soft and regular, respiration twenty, complains of a little pain in his head, has urinated once.

10 P. M. Vomited blood, after which he rested quietly the remainder of the night.

14th,—morning. Pulse seventy-two, respiration normal,

feet a little cool, complains of some pain over the left eye, has urinated freely, bowels not moved, prescribed comp. ext. colocynth ʒss., ext. hyoscyami grs. x. Misc. Ft. mass. Div. pill. no. 7. One pill every four hours.

Evening, 8 P. M. Takes note of time by remembering the hours struck; pulse seventy-four, respiration normal, skin normal, excepting feet, which are a little cool, has urinated, bowels not moved, continue pills.

15th,—morning. Has slept tolerably well all night; pulse seventy-four, respiration and skin normal, feet a little cool, tongue has a light, white coat, complains of pain in the head, no operation from bowels; continue pills.

16th. Complains of his head a little; pulse eighty-four, skin hot, tongue still slightly coated, had three small operations from bowels, urinated freely; directed attendants to give a pill at 12 M. and 4 P. M., and to sponge the surface with vinegar and water; left a solution of tart. ant. et pot. to be given if fever increased, and some pulv. Doveri to guard against too free evacuations from bowels.

17th. Slept well most of the night; pulse ninety, respiration twenty, skin a little above normal condition; has taken sol. tart. once; evinces considerable intolerance to light; darkened the room.

18th. Pulse ninety, respiration twenty, tongue as yesterday, bowels moved by medicine, complained of severe pain in a carious tooth, had some pain in the bowels during the night, which gave way upon the application of an emollient poultice, and he slept quietly till morning.

19th. Face swelled, evidently from the decayed tooth, complains a little of his head; pulse eighty-four, respiration nineteen, tongue and skin normal, has urinated freely, no operation from bowels, has taken two pills, directed to take a pill every four hours till bowels are moved—cheerful and humerous.

20th. Rested well last night, complains of but little

pain; pulse ninety-two, soft and pleasant, tongue, skin, and respiration normal, urinated freely, bowels not moved.

To-day (8th day of the injury) met Dr. Drane, and removed the dressings for the first time, no swelling about the wound, which presented a healthy appearance; sutures "in situ;" that portion of the wound over the whole of the right eye, and a small portion of the opposite extreme, closed by the first intention; some sloughing, and the discharge of a little healthy matter; dressed the wound with simple cerate, compress and roller. Gave some rice.

21st. Complained of pain in his eyes for an hour after yesterday's dressing, owing no doubt to the amount of light admitted to accomplish it. Rested well all night. Dressed the wound as yesterday, found a free discharge of healthy pus. Pulse one hundred; all other functions normal.

22d. Dressed the wound, pulse ninety, no other change from yesterday.

23d. Pulse eighty-six, no other change; the sutures having given way I removed them and dressed the wound with adhesive straps. The quantity of matter discharged, was very considerable, much more than I had looked for, and continued in quantity up to 30th, when the wound commenced filling with healthy granulations, and daily improved up to December 8, at which time I discontinued my visits.

This patient is now apparently healthy, in the full enjoyment of all his natural faculties and functions, with the solitary exception of the sense of smell, of which, he is wholly deprived. He is not disturbed by the application of aq. ammonia to his nose, says, it feels a little warm, but not unpleasant. He has no recollection of any circumstance connected with the accident; remembers of speaking to a negro in the pasture as he went out, has an

indistinct idea of being brought home, but between those two points all is blank.

Remarks.—In looking at the history of this case we are astonished that the patient should have recovered, and much more so, that there should have been no functional disturbance. The os frontis was so broken up, that it scarcely offered any resistance to pressure, but felt like jelly under the finger; a portion was driven into the brain, and the head and face separated. A blow, so severe and crushing, must have given a terrible shock to the whole brain. Yet, at no time did it suffer in the least, but appeared to be active in all its functions; and every organ moved on in the even tenor of its way. It is true, the bowels demanded some assistance; but would not a man, in health, require as much, if placed and retained in a horizontal position, for the same length of time? Reaction came on quietly and slowly; the pulse at no time exceeded a hundred beats, it came up gradually to that point, remained there about twenty-four hours, and daily receded quietly to a healthy standard. We can only account for the phenomena, by the quantity of blood lost in the beginning, being the probable amount requisite for a quiet course, and a happy termination of the case.

Art. IV.—*The London Lancet for April, on Fractures, Hemorrhage, and Gangrenous Ulcers.* By Theodore S. Bell, M. D., Louisville, Ky.

In the February number of this Journal, an attempt was made to institute a comparison between the results of the treatment of serious injuries, as displayed in the best hospitals of Europe, and the results of the bandage treatment in the same kind of injuries. It is very clear, I think, that all valid medical logic, all the pathological characters of that class of diseased or deranged action,

for which the bandage was commended in the essay alluded to, and the vast benefits found exclusively in the principles of the bandage, restricted in their proper place, point emphatically and impressively to the necessity of urging the attention of medical men, to correct conceptions of the value of the roller as a surgical agent. I have been forcibly reminded of this necessity in reading the April number of the London Lancet.

In that valuable journal, the following cases are detailed: "Ligature of the Femoral Artery, for a Wound of the Anterior Tibial, followed by Amputation;" "Compound Oblique Fracture of the Tibia, with Comminuted Fracture of Fibula;" "Compound Comminuted Fracture of Tibia and Fibula, in the London Hospital;" "Gangrenous ulceration of the hand." The lessons derived from success are not always the most forcible and impressive; those that spring from fatal issues enforce themselves vividly on the mind, sometimes, and guide to better methods of treatment. Experience, observation and reading constantly urge the utility of the bandage, in a vast range of maladies and injuries, and I should hold myself recreant to science, in neglecting any useful opportunity for presenting this important subject to medical readers.

Impressed with these views, the reader of these remarks may find much valuable instruction in the following cases:

W. S. Davis, a Member of the Royal College of Surgeons, reports that a robust, temperate farm-laborer, æt. twenty-eight, accidentally wounded himself in the anterior part of his leg, with a reaping hook. The surgeon found the patient, about two hours after the accident, very faint from loss of blood, although the hemorrhage had been effectually arrested by a handkerchief, bound tight around the leg. This dressing was not removed by the surgeon, but in addition to the handkerchief, a tourniquet

was loosely applied over the upper third of the femoral artery, with directions to have it tightened in case of a return of bleeding. In four hours after this, the patient had rallied, and there had been no return of hemorrhage. The symptoms continued in this favorable condition up to the sixth day after the wound, when the hemorrhage returned, and nearly prostrated the patient before his wife could arrest the bleeding with the tourniquet. The femoral artery was tied, and for two days the patient seemed to do well. On the third day from the operation, hemorrhage occurred again; on the fifth day the hemorrhage returned, and on the sixth day, being the twelfth from the time of the accident, this unfortunate patient was subjected to the loss of his leg. His surgeon was not at all satisfied that the patient had received the best treatment. In the report of the case, we find the opinions of several hospital surgeons appealed to, one of whom says: "I am not prepared to say the case could have been better managed. In nine cases out of ten, your first operation of ligaturing the superficial femoral artery would have sufficed to control all hemorrhage, but the tenth case (such I consider yours) has induced surgeons of authority to lay down the rule, that an artery, when wounded, should be cut down upon, and both ends secured; of course there are exceptions to every general rule, and your case might fairly be considered one."

Now I appeal to the readers of this Journal, to say whether it is at all probable that this patient enjoyed the resources of surgery in the treatment of his case? Was there the slightest necessity for a return of the hemorrhage, after its primal arrest? Is there any reason for tying up the femoral artery, for a wound of the anterior tibial? And finally, is it not humiliating to think that such a hemorrhage as this was so managed as to result in the loss of a leg?

These are the considerations that make this case so in-

teresting in reference to the treatment of hemorrhages by the roller. Of the power of the compress and *partial* bandage, we have ample proof in this case. If the surgeon had applied a roller properly to this limb, at his first visit, after placing compresses in their proper places, there would have been no kind of trouble subsequently. The hemorrhage was perfectly controlled for some days, with no better dressing than a common handkerchief, which acted as a ligature. If the whole limb had been enveloped in a roller, greater compression could have been made, if necessary, and the surgeon would have saved his time, his feelings, his arguments and appeals to other surgeons, and the poor laborer would have saved his limb. It is shameful that a temperate, robust farm laborer, aged twenty-eight years, should have received the treatment this man did from a member of the Royal College of Surgeons. There could have been no kind of difficulty in controlling the hemorrhage in this case, because we have proof of the fact in the details furnished, and we are constrained to say that the patient was a victim to a very bungling and outrageous surgery. Reader, be guarded, and do not permit such offensive practices to creep in upon your surgical management.

The next case, that deserves attention is one of "compound oblique fracture of the tibia, with "comminuted fracture of the fibula." This complication occurred in a man aged fifty-two. He fell into a saw-pit, and produced the injury. A piece of bone, one inch and a half, protruded through the stocking, and there was profuse hemorrhage, from a slight laceration of the anterior tibial artery. The tibia was broken downwards and inwards immediately above the inner malleolus. The fibula was broken above the outer malleolus, and again about two inches higher up. This serious injury was complicated with dissipated habits, and an ulcerated condition of the leg. The surgeon determined, very properly to give the pa-

tient the benefit of an attempt at restoration, without amputation. The means resorted to were *debridement*, a compress over the wounded artery, the use of Liston's splint, and the double inclined plane. This was continued four days, and on the removal of the applications, it was discovered that *the bone was protruding as badly as ever*. The reason given for this is: "*That the fracture being below the attachment of the soleus altogether, that muscle acting from the os calcis as a fixed point, pulled the superior fragment downwards and inwards.*" The reduction of the broken bone to its proper apposition, and the maintainance of the fragments in that condition, were the indications to be fulfilled in this case, and the means for obtaining these results are obvious. The pullies would have accomplished the reduction, and the roller would have perfectly controlled the soleus muscles. There is nothing in mathematics more certain than both of these facts. Yet the patient, in the case before us, had to submit to muscular spasms, which dragged the bone from its place, and extensive suppuration took place, in the vicinity of the ancle-joint. Upwards of a month after the accident, half an inch of the protruded bone was removed with cutting pliers, and nearly two months after the accident, the surgeon congratulated himself that he had at length succeeded in applying an apparatus which effectually controlled the muscle, and kept the limb in position! But under proper treatment this patient should have been walking about, at a time, when his surgeon had just discovered a method of controlling muscular action! This discovery was a combination of Liston's and Boyer's splints!

Dr. Carter, the surgeon in the case alluded to, says: "If you can only procure an apparatus which shall resist muscular action completely, you need not attend to position (*quoad* muscular action) at all; it becomes necessary only to relax the fibre when one cannot tire it out by

perfect resistance." The bandage has a greater capacity for "resisting muscular action completely," than any other agent in the hands of the surgeon, but no use was made of its powers in this case, beyond binding a splint on the limb. If the limb had been properly treated, we repeat, and we speak, not only from inductive reasoning, but from personal observation, this patient would have been saved from a great deal of suffering, and would have been walking about much sooner, than he is said by his surgeon to have been hobbling about on crutches. And the surgeon would, with the roller treatment, have turned out a limb, that would have been much better than "a wooden one." The patient seemed to think that his shortened limb, which made him a cripple for life, was so useful that "he would not exchange it for a wooden one for all Europe."

The above is an instructive case, and is well worth the study of the practitioner of medicine. From the pit-fall of bad surgery, manifest in this case, a great deal of useful instruction springs to our view, and urges us to avoid similar treatment, if we would avoid analogous evils. There is not a muscle connected with fractures in the human system, that cannot be effectively controlled by the roller, and the reader cannot fail to see, that all the serious defects of the treatment of the case, we have detailed from the April number of the *London Lancet*, arose from the inability of the surgeon to control muscular action. If the reader remembers the quotations made from Maclise, in the article, on the bandage, published in the February number of this *Journal*, and the remarks that accompanied Maclise's anatomical statements, he will feel forcibly impressed by Dr. Carter's case. The use of "splints" is a great hindrance to the progress of surgery, and an evil to patients, as a general rule. In a long experience in fractures, I have yet to see one that did not yield readily and properly to the bandage, with

but little trouble to the surgeon, and great diminution of the suffering of the patients, compared with cases treated in a different manner.

Another case somewhat resembling the one already detailed, is mentioned in the London Lancet for April. The case was treated in the London hospital. On the 30th of September, a boy, eleven years old, was admitted into the hospital, with a compound fracture of tibia and fibula, caused by his jumping out of a window, fifteen feet above ground. "There was a wound about three inches above the ancle joint, directly across the tibia, through which the fractured bone was protruding for about a quarter of an inch." The fracture involved the fibula, and "was of a very comminuted nature." There was a great deal of hemorrhage. Pressure was applied, *the limb settled on a side splint*, and a dose of opium administered. *Reaction was very considerable*, and towards the middle of October, three large abscesses formed along the course of the tibia. They were opened, and discharged a large quantity of pus. *The child's health now began to suffer;* he had quick pulse, flushed countenance, brown tongue, &c. The propriety of amputation was a matter of debate, but the healthy aspect of the wound, and the extension of the abscesses being such as to demand the amputation of the thigh, plead for delay. Stimulants, tonics, full diet, and *pressure upon the abscesses* were resorted to, and the limb was slung in the hospital apparatus. The sinuses healed, the boy's health improved, and, according to the report, is likely to do well.

In the foregoing case there is a repetition of those unnecessary evils that so constantly meet the reader in reports of European surgery. The youthfulness of this boy, the fracture near the joint, the hemorrhage, the "considerable reaction" which occurred immediately after the injury, all pointed to the necessity of the roller treatment.

That would have controlled the hemorrhage, and the reaction, and prevented all the constitutional suffering, connected with the formation of abscesses. There is one point in cases of fracture that cannot be too indelibly engraven on the mind of the practitioner, and that is, that his patient is always in danger, from the moment that he permits suppuration to take place in a fracture contiguous to a joint. There is no reason why pus should be permitted to form in any case of the kind, and it is as much the duty of the surgeon to guard against such a result, as it is to see that ends of fractured bones are in apposition, or to maintain them in that condition. The reasons for the danger of purulent collections, will be shown in a subsequent part of this paper.

The following is a case that is filled with impressive admonitions on the perils of suppurative action in a wound. The particulars of the case are gathered from the London Lancet for April.

A patient, aged forty-five, was admitted into St. Thomas's hospital on the 18th August, under the care of Mr. Solly, with a compound fracture of the fourth and fifth metacarpal bones of the left hand, with much laceration of the soft parts. The wound was received from a circular saw; the patient had always enjoyed good health, but was intemperate in his habits.

The hand and forearm were placed on a flat splint, and cold water dressing applied. "There was no sloughing, and he soon recovered from the effects of the accident." Up to the 16th September, the case is reported to have done remarkably well, not having shown a bad symptom. "The wound was healing fast; a healthy granulating sore about an inch long, and half an inch broad, remaining open." But stress is laid upon the fact, that on the 16th of September, a new nurse, who had just entered upon her duties at St. Thomas's, dressed the wound, "by applying straps of plaster very tightly over the whole sore."

There is an attempt to ascribe the untoward symptoms that supervened, to this interference of the nurse, but it is absurd to attempt such a thing.

The report goes on with a detail of the symptoms, from day to day. On the 19th of September the sore began to spread, and instead of adhesive strips and the bandage, the surgeon ordered a linseed meal poultice. On the day after, it appeared that the sore had spread much during the night, and commenced sloughing, attended with much pain, and some slight shivering. During the day the sore spread rapidly under the combined influences of ulceration and sloughing. "The hand swelled, and around the edges of the sore, for some distance, there was a dusky red inflammation of the skin. Much aching pain, the skin is hot, pulse one hundred and ten, full, but very compressible; face flushed; tongue dry and brown; appetite bad; head-ache, and great thirst." Here is a frightful array of symptoms, showing itself the day after pressure was removed from the sore, and a linseed meal poultice substituted. On the 16th, a slight change in the condition of the ulcer was attributed to the use of adhesive strips, but the surgeon does not seem to regard the great change he made in the treatment, on the 19th, as connected with the untoward symtoms that were coincident with the change of treatment. Nor do I regard these untoward symptoms as the result altogether of that change, but there is more reason for saying they were, than there was for ascribing "the angry appearance of the sore," on the 17th, to the use of adhesive plaster straps, on the 16th. If the hand had been dressed properly with strips, and a roller, and constitutional treatment had been commenced, on the 16th, this patient would have been saved. The angry appearance of the sore on the 16th, and the symptoms up to the 20th, showed that "diffused inflammation" had extended to the thoracic and abdominal

viscera, a species of danger that should never be lost sight of.

On the 21st, nearly all the symptoms were aggravated. The stale beer grounds poultice, and nitric acid applied to the sore, constituted the local prescription. The constitutional treatment was feeble almost to the verge of homœopathy.

On the 22d, 23d, 24th, indeed up to the 3d October, the case seemed to make no improvement. The constitutional symptoms varied somewhat, but the sore continued its sloughy condition. On the 4th the slough separated, and healthy suppuration was established. On the 11th the case commenced retrograding, on the 12th commenced sinking, *and, under an aggravation of the constitutional symptoms*, the patient died on the 14th. The *post mortem* revealed invaluable lessons. The wrist joint contained thick, turbid pus. The radial artery contained many patches of atheromatous, and a few of bony matter; its inner surface was rough, and the ulnar was in much the same condition. The brachial was slightly diseased. The basilic vein was filled at its upper part with thick, white, healthy pus. All the veins leading from the ulcer were swollen, and filled with pus, their coats being thickened. In the anterior part of the left lung, near its base, was an oval mass of purulent infiltration in its early stage; the air cells were filled with pus. The abdominal viscera generally healthy; there was recent lymph on portions of the peritoneum, and there was perforation of the intestines, in the terminal portion of the transverse colon, the mucous membrane of which was studded with ulcerations, in irregular patches.

Samuel Solly, Esq., M. R. C. S., made some clinical remarks on this case, that bring up the matter, which I wish to impress upon the reader's memory. Mr. Solly said: "*The veins leading from the wound were charged with pus. These vessels absorbed the pus, carried it into the*

system, and poisoned him!" This is certainly a more philosophical cause for the angry condition of the ulcer, on the 16th of September, than the one to which that condition was ascribed. The possibility of such results, as are found in the case under review, should admonish the surgeon against neglecting the only agent that can exercise any control over purulent secretion. If the hand had been dressed, originally, with the roller, and constitutional treatment had been resorted to, the wound could not have assumed an angry appearance; and even after the retrograde tendency manifested itself on the 16th September, the roller treatment would have prevented that dreadful state of things, that continued with varying results, up to the 14th of October. If the roller had nothing to commend it to the attention of medical men, beyond its power over purulent formations after fractures, injuries of the joints, gun-shot wounds, &c., it would still be the greatest blessing in the hands of the surgeon. It will not be out of place now to take a view of some of the phenomena of purulent inflammation. Of all the matters presented to the consideration of the surgeon, in treating serious injuries that are curable, the proper management of the case so as to prevent purulent secretion, or to control its movements, after it has taken place, is one of the most important. It is in this field of curative power, that the roller successfully vindicates its claim to the attention of the philosophic surgeon, and clearly shows how much nature may be indebted to art in the removal of evils in the animal economy. The great range of the usefulness of the bandage has been shown in my former essays on the subject, but its salutary, beneficent agencies in the treatment of purulent secretion have not been dwelt upon sufficiently.

As a proper preliminary view of the pathological phenomena, and effects of purulent secretion, it will not be considered amiss, if the reader's attention is called to the

microscopic revelations of the phenomena of purulent formation. Copland gives the following graphic account of these:

"The formation of pus in an inflamed surface or tissue takes place as follows, according to the observations of Kaltenbrunner, Gendrin, Carswell, and the author. In the field of a microscope the inflamed capillaries seem uniformly red, and the circulation in them is retarded or has ceased. Serum and coagulable lymph are effused in the areole of the tissue; and, if the inflammation is very intense, the exuded fluid is more or less colored by the exudation of red globules or of blood. The whole of the inflamed part is quite opaque. As soon as suppuration commences, the red color begins to disappear in various points, giving place to a yellowish granular-like matter in the capillaries, and connecting cellular tissue. In the centre of the inflamed tissue, several of the capillary vessels, which were obscured by the accumulated blood, reappear, some containing red, others yellowish-gray globules, which gradually become more distinct, increase in number and size, begin to move slowly, and, traversing the capillaries, arrive at the surface of the tissue, or at the edges of the solution of continuity, if this has occurred, in the form of globules of pus (Carswell.) Gendrin states that he has distinctly seen the globules of blood, after stagnating in the capillaries of the inflamed part, losing their coloring envelopes, becoming opaque, and assuming a grayish yellow color, approaching to that of pus; and that he has traced them moving slowly in the capillaries, and, as they advanced to the suppurating surface, gradually acquiring all the characters of pus. The observations of Kaltenbrunner agree with those of Gendrin as to the transformation of the blood-globules into the globules of pus, and as to this taking place *within* the capillaries; but they also seem to prove, what I have observed in several instances, that the red globules, or

blood, exuded in an intense state of inflammation into the areole of the tissue, undergo a similar change to that which takes place within the capillaries when the circulation becomes stagnant in them; and that pus may thus be formed *without*, as well as *within*, the capillaries of an inflamed part, the fluid portion of the secretion consisting of the serum of the blood. Kaltenbrunner even supposes that not only the blood of the inflamed tissue, but likewise a part of the tissue itself is converted into pus-globules."

"From these facts it is evident that, in an inflamed part, certain changes precede the formation of pus: 1st. A loss of the vital tone, or a change of vital action in the extreme capillaries. 2d. A retardation or stagnation of the circulation, and partial coagulation of the blood in them. 3d. A change of the blood-globules into pus-globules, and the discharge of the latter with a portion of serum on the suppurating surface. 4th. A similar change of the globules of blood extravasated in the inflamed part, these globules losing their coloring envelopes, and becoming the globules of pus."

There is scarcely a day of a surgeon's life, when it is not essential that these principles and facts shall be present to his mind. They are guides that lead him through intricate labyrinths; they are lights that enable him to "see by faith, and not by sight," and reveal vital knowledge to him, as perfectly as though it were an object of one of the senses.

In connection with these facts the following admirable remarks, on the changes observed in the blood in sthenic inflammation, are quoted from the British and Foreign Medical Review:

"I. *a.* The quantity of *fibrin* in the BLOOD undergoes a decided increase; the *plasticity* of the whole mass, therefore, but especially that of the liquor sanguinis, is greatly augmented. *b.* There is a corresponding increase in the

proportion of *white* corpuscles, which are present in large amount in the vessels of the inflamed tissues, and have a great disposition to adhere to their walls, but which are also present, to an unusual amount, in the entire mass of the circulating blood. *e.* The increase in the proportion of fibrin is chiefly a local action, exerted on the blood during its passage through an inflamed part, and probably effected by the instrumentality of the *white* corpuscles. *d.* There is usually an increase, not only in the *quantity* of fibrin, but in its *plasticity* or tendency to become organized, as shown by the greater perfection of the fibrous structure into which it passes in coagulating. This may consist in an increased attraction between its particles, which continues to operate for some time, causing contraction of the fibrous net-work, subsequently to its first production. *e.* There is also an increased attraction between the red particles of blood, causing them to adhere together in rolls more firmly and for a longer period than they do in healthy blood. *f.* To these two causes, usually aided in their operation by the slowness of the coagulation, all concurring to produce an increased tendency to separation between the red corpuscles and the liquor sanguinis, we may ascribe the production of the buffy coat of inflammatory blood. *g.* The increased *plasticity* of the blood is so constant a phenomenon of inflammation, that it may be regarded as essential to the presence of that state.

"II. *a.* On the other hand, the *formative power* of the inflamed TISSUES appears to be diminished; their usual functions, whether of nutrition or secretion, being completely checked, or insufficiently performed, or perverted in their character. *b.* While, therefore, an over-production of fibrin is taking place in the blood, there is diminished consumption or appropriation of it in the tissues. *c.* If the inflammation be severe in its character, the vitality of the tissues is so diminished as to cause, not only

a cessation of their formative actions, but also an increased tendency to disintegration, as shown in *suppuration* and *ulceration;* or positive death of a large part, as in *gangrene. d.* The depression of the vitality of the tissues sometimes appears to result from a previous over-excitement of it, as when inflammation follows excessive use of a part, or the application of stimulants to it; but it is sometimes the consequence of some directly sedative action, as that of cold. *e.* Hence both *determination* of blood and *congestion* have a tendency to produce inflammation; the one being a state of over-excitement, which is very prone to occasion subsequent depression, while there is at the same time a tendency to increased production of fibrin in the blood, the other being itself a state of depression of formative power in the solids, but not passing into inflammation, unless there be at the same time an increased plasticity of the blood.

"III. *a.* The MOTION OF THE BLOOD in the capillaries of the inflamed part is greatly retarded, as we might have anticipated from the impairment of the functional operations of the solids. There may even be a total stagnation of the blood in the capillaries of a considerable portion of the tissue, which will be followed by its death and disintegration. The degree of stagnation will depend upon the amount of the depression of the vitality of the surrounding parts. *b.* The motion of blood through the vessels in the neighborhood, however, is more rapid than usual, and these vessels are themselves enlarged; so that the total quantity which passes through an inflamed member in a given time is greater than usual. *c.* The vessels are enlarged both *in* and *around* the inflamed part, in consequence of a diminution of the tonic contractility of their walls, which causes them to admit of abnormal distention by the impulse which the blood receives from the heart. This diminution is another evidence of the depression of

the vital properties of the solid tissues in an inflamed part.

"IV. *a.* The PRODUCTS of inflammation differ from those of the ordinary processes of nutrition and secretion, not so much in their materials as in the nature of the change which these have undergone. *b.* When the intensity of the inflammatory process is moderate, the *liquor sanguinis*, containing an unusual proportion of fibrin, and possessing a high degree of plasticity, is effused into the neighboring tissues or upon the neighboring surfaces, being generated, by the local actions of the part, faster than it can be withdrawn by its formative processes. By the organization of which it is susceptible, when in contact with the living solids, it spontaneously assumes the form of simple fibrous tissue, constituting false membranes on the surface, or consolidating the substance into which it is effused. *c.* If the inflammatory process goes no farther there is no disintegration of the original tissue; but if its vitality be too far depressed it dies; and the changes which it consequently undergoes impress themselves upon the fibrinous effusion. The fibrin loses its vital power of coagulation, and in this aplastic state becomes the chief ingredient in the *liquor puris;* while the cells *(pus-corpuscles,)* which are found floating in it, resemble the white corpuscles of the blood in a degenerated form. *d.* When the inflammation is very severe, and the stagnation of blood in the capillaries of the part is complete, an entire loss of vitality in the whole tissue at once, or *gangrene*, is the result. Gangrene does not originate, however, in inflammation alone, since any other cause, such as the long-continued action of cold or pressure, interrupting the capillary circulation, or obstruction to the supply of blood through the arterial trunks, will equally produce it, by the suspension of the formative processes thus occasioned. But unless some degree of inflamma-

tory action, that is, an increase in the plasticity of the blood, be set up at the same time, there is an indisposition to the formation of the line of demarcation between the sound and the dying parts, and the gangrene has a tendency to spread."

The subject is now fairly before the reader, and he can have no kind of difficulty in seeing why the bandage has all those important and invaluable uses, ascribed to it by all surgeons who have enjoyed an experimental and observational acquaintance with it. It is difficult to imagine how anything else in the treatment of the most usual fractures, the generality of ulcers, and a variety of gun-shot wounds, was ever thought of. What kind of comparison can be instituted between the treatment of fractures by splints, and by the roller; of ulcers, by hundreds unguents, and by the adhesive strips and the bandage, and of gun-shot wounds, by those means that invite gangrene, and the roller, which prevents it? Who can look upon the phenomena of sthenic inflammation, so graphically and clearly described, in the above quotation from the British and Foreign Medical Review, and imagine any surgical agent that boasts a thousandth part of the beneficent uses of the roller?

But there are other important considerations that belong to this subject of purulent secretion. From the facts contained in the quotations above, it is clearly seen how beneficial the bandage may be in its control over the local phenomena of the formation of pus, but this is of small moment compared with the constitutional effects. These effects are very conclusively shown, in an essay on "Secondary Abscesses," published by Dr. John Watson, in the American Journal Medical Sciences, and quoted by Dr. Lee, in the American edition of Copland's Dictionary of Practical Medicine. The reader will necessarily have to travel over some of the ground he has already been over, but he had better do that once too often, than not

often enough by one time. Dr. Lee thus quotes Watson:

"By a variety of cases, whose history is given, Dr. W. shows: 1st. That injuries and surgical operations not dangerous in themselves, may be followed by severe, and even fatal, secondary affections in distant parts of the body, and in organs essential to life; and that the pathological states, thus induced, are not necessarily connected with a previous external injury, inasmuch as they may be induced, independent of such injury, by disease arising spontaneously in the system. 2d. That the most usual pathological appearances found after death in these cases are: depositions of purulent matter, inflammatory congestions, effusions of coagulable lymph, sero-purulent effusions, effusions of sanies or bloody serum, adhesions of contiguous surfaces, ulcerations, and disorganizations of different structures, as of the eye and of the tissues about the joints. The whole of these pathological conditions are not often found existing together; many of them, however, may occur in the same case; the tissues within which these morbid changes are most common are the cellular tissues, whether subcutaneous, parenchymatous, or intermuscular; the serous tissues, as of the thorax, the abdomen, and encephalon; the synovial membranes, the skin, the muscular texture, &c. The organs most frequently affected are the lungs, the liver, the brain, the spleen, and the knee and shoulder joints, but almost any part of the body may become the seat of these secondary disorders. 3d. In all cases of the kind under consideration, where thorough examination was made, the inner coats of the veins in the neighborhood of the primary injury, and in other parts of the system, were found inflamed. In some cases the arteries also were found diseased; but inflammation of the inner coats of arteries, unlike that of veins, appears to have no necessary connection with the other consecutive affusions. 4th. That

in cases of secondary abscess, and other consecutive disease connected with inflammation of the veins, purulent matter was generally, but not in all instances, found within the cavity of the veins. It is not yet fully established whether phlebitis is always attended with secondary local affections; though there is considerable reason to believe that such is the fact. 5th. That the purulent matter formed within the veins may be either blocked up by a barrier of lymph, or exist in a free state, without any such barrier to prevent it from entering into the circulation, and contaminating the blood. But the secondary abscesses are known to occur in connection with phlebitis, whether the pus in the veins be free or circumscribed; and even when no purulent matter has been detected, either in the original wound itself, or within the veins leading from it. 6th. That purulent matter existing free within the cavity of the veins does not necessarily lead to the formation of secondary abscesses in the viscera. 7th. That besides these secondary disorders connected with phlebitis, there are others occasionally resulting indirectly after operations, &c., of an entirely different description, and so far as we are able to judge, in no way connected with disease of the veins. Such, for example, as appear during the existence of high inflammatory excitement, or come on more slowly after the system has been much exhausted by contracted disease and hectic fever.

Dr. W. maintains that secondary depositions, and other pathalogical phenomena connected with them, are not, in all cases, if indeed in any, simply the result of absorption, and subsequent transposition of pus from a remote part of the system; and that as they occur in all parts of the body, without any definite relation to the part primarily affected, they cannot be attributed to any special sympathies between the parts first diseased and those subsequently affected; rejecting also the doctrine which

imputes local violence to the part secondarily diseased; as well as that of constitutional irritation, which, besides its indefiniteness, throws no light on the manner in which the constitution becomes involved. Dr. W. believes that the doctrine which ascribes secondary abscesses to a vitiated condition of the blood, induced by the purulent matter, or other morbid exhalations of inflamed veins mixing with the blood, and thus exciting local inflammation in the parts secondarily diseased, is the one most conformable to facts, while, at the same time he admits that matter, formed originally within the veins, may subsequently be thrown out of the circulation as any other foreign or useless substance, without exciting local inflammation in the parts upon which it is deposited. The existence of pus in any part, is no proof of the previous existence of inflammation in that part."

The reader will not find his labor in vain, if he rises from the perusal of these valuable facts, with clear views of their great, their vital importance. And when he becomes an expert in the philosophical and scientific use of the roller, and sees the manifold benefits of its application, and feels by comparison, how much of suffering, and how many perils, and other evils, he has saved his patient from, he would not exchange that simple agent, for all other appliances known to surgery, in these cases.

But let us resume an examination of some of the details of the phenomena of purulent secretion. The case in St. Thomas's hospital, of which an abstract has been given in this paper, is a most valuable one in connection with all the facts and observations brought forward here, on the subject of purulent secretion. How impressively does it corroborate the conclusions of Dr. Watson! With a hop and skip philosophy that has loaded practical medicine with mountains of error, the surgeon of St. Thomas's took it for granted that the coincidence of two circumstances, stood in the relation of cause and effect! He

assumed, that because the patient got worse on the 17th, the change was the result of strapping the hand, instead of using a poultice! That was a fatal piece of false logic, and led to all the subsequent disasters of the case. I think this will be manifest to any one, who has read the report of the case of carbuncle contained in the May number of this work. In that report, it is shown that a violent form of gangrene, accompanied with grave constitutional symptoms, came on while the linseed meal poultice was on the hand, and that a change of local treatment, consisting of a tight bandage to each finger and the thumb, and a roller to the hand and forearm, immediately stopped the gangrene, and relieved the constitutional disturbance. And I am as perfectly persuaded that a kindred result would have followed the same treatment, in the case in St. Thomas's hospital, as I am of any truth in therapeutics. There is not a solitary fact, connected with the subject of inflammation and purulent secretion, that does not indubitably show this to my mind, and all my experience and observation corroborate the view.

Upon these points it may be useful to detail a case which passed under my observation recently, and which was watched with considerable anxiety. A young man, for whom I entertained a warm friendship, was attacked some months since with a swelling in the inguinal glands, which terminated in a copious purulent secretion. The case was not venereal. From various causes, such as business that required him to travel, my patient's case was protracted until three large sinuses presented themselves, in the abdominal parietes. Two of these sinuses were nearly perpendicular, the other was transverse, occupying about five inches in length. They resisted all the usual means of relief, and became so threatening, that I had to confine the young man to bed. A roller was placed on the foot, and passed up the leg, to the vicinity of the sinuses. Adhesive straps were drawn lightly

across the sinuses, and thick compresses laid over them, so as to command them from the bottom, to their open end. Over these the roller was drawn tightly. Purgative medicines were ordered, consisting of blue mass and ext. colocynth, in sufficient quantities to purge freely three or four times a day. From the beginning of this course, the improvement of the patient was rapid beyond my most sanguine expectations. The sinuses rapidly healed, and in two weeks, my patient was discharged; the sinuses were, at that time, so nearly well as to need no further attention, and the constitutional health was better than I had ever known the young man to possess before. This case is selected from a great number of a similar character, but the only reason for selecting this, is because it is the most recent one I have seen.

I have dwelt upon the subjects embraced in these remarks, because of their vast importance. They address themselves to the surgeon in his daily walks, and are intimately connected with true surgical art, and the interests of humanity. A man may be called upon to treat one hundred cases of the kind referred to in this paper, where he will be summoned to one case of lithotomy, or of hernia, requiring an operation. And in no other department of surgical treatment, than that connected with the common occurrences of professional life, is it more necessary to have correct views, and the use of proper remedial means. A surgeon who should apply a poultice to the perineum, for a calculous disease, or an unguent in cases of strangulated hernia, might safely be considered a little behind the times, but to my mind, the use of splints alone for fractures, and unguents and balsams for ulcers and gun-shot wounds, is quite as preposterous and futile.

But the reader must be guarded against the impression that the bandage is the sole means of treatment, in the various injuries and disorders for which it has been com-

mended in this essay, and the preceding papers on the bandage. Constitutional treatment and a prudent regimen are not only useful in almost all cases, but absolutely essential in many. In relation to purulent secretions, Copland says: "Experience having shown the advantages of removing pus by exciting absorption, the means most effectual for attaining that end, must be pursued." The means usually resorted to, are iodine, sulphureous *douches*, frictions with mercurial, camphorated, and terebinthinated liniments, and blisters, and they are, to a great extent, useless. Among the effectual measures, for exciting the absorption of pus at the least expense to the constitution, when it can be applied, the roller is first. It controls the action of the veins, in the sthenic varieties of inflammation, and sustains them above the point of debility in the asthenic form. The next measure of importance is the use of drastic purgatives, and in an inferior degree, dieuretics and diaphoretics are useful for promoting the action of the absorbents. If these measures of control are neglected, absorption may go on at a ruinous rate. And it must be borne in mind, that the means commended here, must be persevered in, as long as heat, pain, redness, and swelling are connected with purulent accumulations.

In former essays the utility of the roller has been vindicated by its own results; in this one, its uses and benefits have been sustained by the disasters that attended its neglect. I pray the reader to ponder well upon these principles and facts recorded in the essays on the bandage, in this Journal. They are vitally concerned in all the walks of surgery; but, above all other considerations, they are most intimately connected with the highest interests of this life. They are associated with questions of deformity and symmetry, with the integrity of the body, with a crippled gait for life, and with life and death. Reader, look well into this matter, for the honor

of your profession is often staked upon issues involved in the principles and facts presented to you in these quotations; the limbs or lives of your patients may hang trembling in the scale of your judgment, and upon your acquaintance with these things, and a decision founded upon accurate knowledge, may depend the weal or woe of numbers of your fellow beings. Scrutinise the facts detailed in the quotations from Dr. Watson, and the British and Foreign Medical Review, and ask yourself what evil influence is pourtrayed there, that skillful and scientific knowledge of the roller will not amend? What vital property is there in these reparative processes that will not derive material support from the bandage? Can it be a matter of surprise to any one, who looks well into these things, that in regions of surgery, where the use of the bandage is neglected, we constantly hear of extensive purulent secretions in cases that know nothing of such disasters, where the bandage is judiciously applied? Can we wonder that limbs are sacrificed on the most frivolous pretences, and lives endangered or lost, that should know nothing of peril, if surgical art were in accordance with the truths of pathological anatomy? To guard the readers of this *Journal* against the whole machinery of error in all cases of which the roller is cognizant, has been the aim of the various essays and reviews on the roller, that have appeared in these pages. And the writer of these remarks, has received ample evidence, that these labors have not been in vain.

MISCELLANEOUS MATTERS OF PRACTICAL MEDICINE.

The number of the London Loncet from which the foregoing surgical cases were drawn, also contains a number of papers of practical value, an abstract of which cannot fail to be useful to the readers of this Journal.

Nitrate of silver, for lacerated wounds of the face, &c.—

John Higginbottom, F. R. C. S., reports the great success of the prompt application of the nitrate of silver, to lacerated wounds of the face. The advantages ascribed to it are, first—the prevention of the irritation arising from the irregular edges of lacerated wounds, and the induction of adhesive inflammation, as readily in such wounds, as in those that are incised—second, the inflammation, swelling and irritative fever, consequent on lacerated wounds, are in a great measure prevented, and as there is neither ulceration, nor loss of substance, unsightly scars and raised cicatrices are avoided.

Mr. Higginbottom reports two interesting cases of wounds of the face, and one of lacerated perinæum, in which the nitrate was used with advantage. In the case of the lacerated perinæum, the edges were drawn together by the interrupted suture in two places, and the nitrate of silver applied along the skin on each side, close to the line of the wound, and on the line of the wound. On the third day the sutures were removed, and the ligature marks touched with the nitrate to prevent ulceration. "The wound united by the first intention; there was no swelling; and it is worthy of observation, that the eschar surrounding the laceration made by the nitrate of silver had the power of fixing the parts as if adhesive plaster had been applied." The catheter was not used to draw off the urine, but it should not be neglected in such cases.

The plan of treatment thus urged by Mr. Higginbottom, may be useful in wounds of the localities named, but in parts accessible to the roller treatment, the latter should have the preference.

On beds for the sick.—This is a subject that well deserves the attention of medical men. My attention was forcibly directed to the matter some years ago, by the perusal of the case of Dr. Nichols, of Danvers, Mass. He had been afflicted several years with a severe neuralgic

affection, for the relief of which all medication, and all other means were ineffectual. He had been forced to cease all efforts at locomotion, and had resigned himself to a life of hopeless misery. In the midst of his despair, he read, or heard of Dr. Arnott's Hydrostatic bed, and had one made for himself. The use of this promptly brought relief, and restored him so perfectly to health, that Dr. N. walked several miles, to a meeting of the Massachusetts medical society to deliver the lecture on his case, which I read with pleasure and profit. The hydrostatic bed is invaluable in many cases. Some years ago, I was called to a gentleman from Mississippi, who had an acuteness of neuralgic suffering far beyond anything I have ever heard of in any other case. For three years he had never dared to let a ray of light fall upon his eyes, except for the momentary examination of his physicians, and it was with difficulty that Dr. Flint and myself obtained even a momentary glance at the eyes. The patient sedulously shut out light; his windows were not only darkened by the shutters, but dark curtains were hung across every avenue by which light might reach the room. The fire was perfectly screened. In addition to these measures, the patient wore dark goggles, with several folds of black silk interposed between the eyes and the glasses. From these extraordinary measures, the reader may infer the extreme extent of photophobia in this case. It was infinitely beyond any thing I had ever known then, or any thiug I have seen since. Another untoward symptom in this case was the inability in the patient to sleep. For three years he had never slept more than half an hour, in the twenty-four hours. In other respects the constitution, and the natural functions, seemed to be in good condition.

In consultation with Dr. Flint, it was determined to use Arnott's Hydrostatic bed, and to rely upon it mainly for the management of this singular case. To our great

gratification, the patient slept soundly through seven consecutive hours the first night he was placed on the water-bed, and he commenced improving rapidly. He felt such great confidence in the powers of this new bed, that he soon followed the example of the recipients of miraculous favor, recorded in the histories of the Evangelists—he took up his bed and went home. It was a cumbrous affair, and the residence of the patient was a considerable distance from navigation. But Mr. D. had felt so much relief from the sleep secured by this water-bed, that he underwent all the difficulties, in transporting it over land, in order to be certain of a resource against suffering.

I have seen so much benefit from the water-bed, in other cases, besides the one detailed above, that I could not do less than commend it to the attention of practitioners. The lady of a distinguished clergyman in this city, after months of extreme affliction, had her bed of suffering made easy, and her dying agonies soothed by the water-bed—the Rev. Benj. O. Peers, in his dying hours, found a comfort in Dr. Arnott's Hydrostatic bed,* that had been sought in vain, from other sources.

In some recent numbers of the London Lancet, there are several suggestions connected with beds for the afflicted, that are worthy of notice. J. Henry Rogers, Esq., surgeon, thus speaks of what is called Cottam's spring-bed:

"In the autumn of 1846, during the time I was acting as house-surgeon of the Middlesex Hospital, some beds were sent there for trial by the inventor, which had been constructed by him with the view of securing all the advantages of the Arnot bed, without being liable to similar objections. These beds consisted of a light iron frame,

*A description of this bed may be found in the 2d volume of Arnott's "Elements of Physics."

with transverse elastic steel bars, to which were attached a number of iron springs placed vertically, supporting a thin detached horse-hair mattrass. As these springs act independently of each other, and yield in proportion to the pressure from above, the mattrass adapts itself perfectly to the surface of the body, the pressure being as equally diffused as in the water-bed. As the body of the patient is separated from the air merely by a thin mattrass, evaporation goes on as freely below as above, so that no accumulation of moisture can possibly take place —an advantage which was speedily discovered by the first patient who was placed on one of these beds, and who had been for some time confined to an Arnott bed. These beds being found fully to answer the expectations formed of them, have since been generally employed in the hospital in all cases where the Arnott bed was formerly had recourse to. There are now sixteen in constant use in that establishment; they are portable, cheap, and not liable to get out of order. I saw one during a recent visit to London, which had been in constant use since the autumn of 1846, and was in as serviceable a condition as when first sent in."

But the most useful article of this kind, is a water-cushion, invented by a Mr. Hooper. It is of an oblong form, and about 20 inches by sixteen in size. It is made of vulcanized India rubber, and is as soft as velvet. The space between the under and upper surface of the cushion should be about one inch, or one inch and a half. The cushion should be provided with a tube, with a stop-cock and funnel, by which the cushion may be filled or emptied, or the temperature of the water may be changed, without incommoding the patient.

There are many cases in which these water cushions are invaluable. Mr. Sampson says, "the water cushion is valuable in fever as a refreshing pillow for the head, in acute rheumatism as a cool support for the inflamed limb,

as also in certain uterine affections, inflamed piles, &c., and when filled with hot water, it furnishes a most convenient means of imparting warmth to the spine."

Mr. Ceasar Hawkins, of St. George's Hospital, urges the use of the water cushion, "where the sacrum and hips are threatenened with sloughing, or in which sloughing has taken place; it is employed where the scapulæ, or spine, or heels are in danger, and where the os coccygis and ischia require defence. In injuries, such as fractures, or diseased joints, the arm or the leg may be laid lengthwise, with advantage on the water-pillow, to protect the elbow or heel from the effects of pressure.

The reader cannot fail to estimate properly the important character of the water-cushion. It possesses means of comfort for patients, that may be sought in vain without it.

Intestinal obstruction, arising from disease of the sigmoid flexure of the colon and the rectum, in which the descending colon was successfully opened in the loin.—Two interesting cases of this kind, are detailed, in the April number of the London Lancet, by T. Field, and J. Clarkson, Esqs., Members of the Royal College of Surgeons. The first case occurred in the person of a corpulent, muscular forger of coach axles. He was thirty-three years of age. He had always enjoyed good health, until within a year past, about the beginning of which time he began to suffer from pain in the bowels, constipation, and tenesmus, his stools becoming scanty, and voided with difficulty." For months these symptoms continued, becoming more aggravated in form. The patient often vomited after eating. Four days before Mr. Field's visit, the bowels had ceased to act, and all the symptoms became greatly aggravated. The abdomen was distended and tympanitic; there were pain, tenderness and some bulging over the transverse colon; the pain was paroxysmal, and accompanied by strong tenesmus; vomiting

was almost incessant. Various and appropriate means were resorted to for opening the bowels, and these measures were continued, unsuccessfully, for twelve days. The case then assumed alarming symptoms, and Mr. Field determined upon an operation. "The patient was extended on a bed, with his face downwards, and a transverse incision was made in the left loin, commencing about two inches from the spine, and carried directly outwards for five inches and a half, about one finger's breadth above the crest of the ilium. The skin, fat, latissimus dorsi muscle and quadratus lumborum were successfully divided, and a shining membrane exposed." The bowel was found, at considerable depth; sutures were passed through it, to retain it in its position, and subsequently to affix it to the edges of the wound, and incision was then made into it, to the extent of half an inch, which immediately gave exit to an immense quantity of light-colored fluid feces. The patient was at once relieved from all distressing symptoms. The opening in the bowel was fixed with sutures to the skin, a large bread poultice was placed over the wound, and the patient enjoined to lie on his left side. Through the following night the evacuations continued abundant; the belly became soft and free from tenderness, and the general symptoms were still farther relieved. On the third day after the operation, the wound was rather inactive; it was syringed with yeast mixed with warm water, and dressed with lint and oil. Granulations sprung up, and the patient recovered, and resumed his trade, which required great physical exertion. He was occasionally constipated, caused, apparently, by a contraction of the artificial anus, which was relieved by injections of warm water.

This patient lived 21 months after this operation. The *post mortem* revealed a stricture, about 4 inches long, in the sigmoid flexure of the colon, this portion being filled with coagulable lymph.

The other case occurred in a robust, healthy looking woman, aged twenty-one. It is unnecessary to enter into the details of this case, as those, reported for Mr. Field, are very copious, and clearly mark the justifying symptoms for the operation, and the character of the operation. Mr. F.'s patient recovered her health for a time, and survived the operation fourteen months. In this case: "the obstruction was about six inches from the anus, and on a level with the fundus of the uterus. It consisted of dense, cartilaginous substance, surrounding the intestine, and completely obliterated the canal to the extent of half an inch." There was a great deal of diseased appearances in various parts of the abdominal viscera.

In the debates of the Royal Medical and Chirurgical Society, drawn forth by these cases, various members urged the importance of an early operation in such cases. Drastic purgatives, for obstructed bowels, are prejudicial, and much judgement is required, in order to determine how long purgative measures shall be persevered in, and when the necessity for the operation is absolute. There must enter into the material for making a judgment, the fact, that malignant disease is often connected with these obstructions. The whole subject is one of great interest to the physician, for lives are often lost in these cases, that should be saved.

Mr. Hodgson said, during the debate, that vomiting does not occur as early in the disease, when the obstruction is in the large intestines, as when the small intestines were the seat of it. The entire matter involved in these cases is worthy of the study of the physician, and it is respectfully commended to the readers of this Journal.

REVIEWS.

ART. V.—*On the Treatment of Fractures, &c., by the use of the Roller.* By B. W. DUDLEY, M. D., Professor of Surgery in Transylvania University. Transylvania Medical Journal, 1850. Vol. 1, No. v.

The paper before us embraces a subject which has occupied a considerable portion of this Journal within a few months past; we shall not therefore, enter upon an elaborate analysis of the paper, nor weary our readers with the many reflections that naturally arise from the perusal of an essay, combining some merit, with numerous faults; thrown together with seeming disregard to system or order, and marred on every page by errors, that reflect most seriously either on the author or proof reader, perhaps on both. The practical import of the essay may be expressed in a single word—the roller; whether the fracture be of an arm or leg—of the neck of the femur or scapula, each one requires and receives but a single remedy.

Of all the accidents to which the bones are liable, fractures are, by far, the most frequent; none demand more prompt and careful attention, nor illustrate more clearly the importance and utility of the surgeon's art. To the surgeon nothing can be of more moment than a clear understanding of the nature of these accidents, without which he must often inevitably fail in discharging with skill, the duty that fractures require of him. A mistake may be fatal to his reputation; for a distorted limb will be considered as a living monument of his want of skill,

and is but too often an enduring, and should ever be, a mortifying reproach to the surgeon.

It is but reasonable to suppose that these accidents were among the very first that awakened the solicitude, and gave exercise to the ingenuity of the great progenitors of our race. Certain it is, that in the most ancient records of medical science, we find very minute and complicated directions for the management of these serious casualties; mechanical genius has in all ages been called into requisition, and the inventive power of man has, in no department of surgery, shown itself so fruitful as in this. Screws, clamps, splints of every imaginable shape and material, bandages innumerable, and every contrivance, that was supposed to be capable of repairing the injury, or of adding to the quiet and comfort of the sufferer, meet us in surgical records.

But the bed of Hyppocrates, and the Glosocomon, as used by the ancients, and pictured in engravings in the works of the great master Paré, have been abandoned on account of their complexity. Avicenna's method has shared the same fate, although it was approved, and in some degree modified, by Petit, Heister, and Duverney. The machines of Bellocq, Hook, and countless others have deservedly fallen into disuse. Desault's plan, more simple and practicable, was yet beset by so many difficulties that it could not be sustained, even when supported by the improvements of the distinguished Boyer and others. These innumerable appliances, that have rapidly succeeded each other in every age, have probably owed their existence to the infinite variety of the accidents, which they were intended to remedy. There are striking differences in fractures as they occur in different bones, or in different parts of the same bone; in regard to the direction of the fracture; the relative position of the fragments; and in the attending circumstances, which may present the fracture to us as simple or compound.

But varied as these conditions may be, the indications are quite simple. If displacements accompany the accident, the indications are: 1st. To readjust the separated fragments. 2d. To maintain them in proper position until they are united by ossific matter, and, 3d. To anticipate such accidents as are likely to happen, or to meet them with suitable remedies when they have already supervened.

The more simple the means by which these purposes are effected, the better, and the tests to which we would submit any mechanical contrivance, for securing fractured limbs, are their simplicity—promise of comfort, and success. Thus tested, we believe the bandage, as commended at various times by some of the ablest men of the profession, is infinitely superior to all the expensive, cumbrous, yet ingenious machinery, that in former times, stood in fearful array in almost every surgeon's office; and we cannot but be surprised, that while so many able and intelligent writers seem to have appreciated the importance of this simple but powerful agent, few availed themselves of all the benefits that flow from its judicious application.

But the numerous mechanical contrivances, to which we have alluded, should not be discarded without consideration; students should ever bear in mind the judicious advice of Charles Bell "not to pin their faith upon any individual master, school, or hospital, as is too often the case; but look around them, and particularly learn what our predecessors have said and done." Half a century since, one of England's most distinguished surgeons and physiologists, unblushingly declared, that "reading was folly," and but too many of his ardent admirer's discovered, when too late, that the greater part of their lives had been thrown away, in the futile effort, to wring from nature, truths long since brought to light by those very men whose labors they were taught to scorn and deride.

The spirit of the present age is happily with Mr. Bell, and some study of the literature of the profession has become an imperious necessity; while nature is appealed to as a test of truth, and consulted with a view to further accessions to the common stock. Hence we are no longer in danger of losing what is old and good, no matter how much we gain in our search after novelty. "Those who are not aware of the observations and discoveries of the great men who have preceded them, are in continual danger, in straining after new inventions, of only restoring what has been discovered, tried, and rejected before their time." Hence the importance of looking into, even, the errors of the past, that we may wisely steer clear of the shoals that may have proved disastrous to others. In no department of medicine is this of so much moment, as in that which regards the treatment of fractures. How often has the same instrument been ignorantly reproduced, and at the cost of how much of human suffering? Truth and error should be alike closely analysed, for, thoroughly comprehended, both serve to direct our steps in the pathway of duty. Having examined a great number of instruments for dressing fractures, and witnessed the application of not a few, we take pleasure in awarding to our author the honor of contributing efficient aid to the revival and extension of the use of the bandage as a substitute for them all; for we repeat, that in our opinion, with the addition of simple splints, the roller is, beyond all question, the most simple and perfect means in the hands of the profession. It is alike convenient to the surgeon and comfortable to the patient. We are free to confess, however, that we have not found it practicable to dispense with splints; nor do we know any one, except our author, who would feel authorised to rely wholly on the bandage. Professor D. declares that he has not used a splint, save in fractures of the forearm, "for thirty years past in practice," and then only for the purpose of pre-

serving the space between the radius and ulna, so absolutely necessary to the motions peculiar to that part of the body. We presume there is some mistake here, since the Professor says, on page 446 that: "in consequence of the obliquity of the fracture, splints eight inches long were directed to be tied on" in a case that occurred "within the past year." This is certainly an admission that splints do sometimes become necessary, and in this opinion there is a unanimous concurrence amongst all surgeons with whose writings or opinions we are acquainted. Although "the bandage," to use the language of Boyer, "instead of occasioning an edematous swelling of the limb, obviates it by making equable pressure on all its parts, which acts in direct opposition to the muscles, that tend to separate the portions of bone, and which, by acting on these muscles, diminishes their irritability and enfeebles their action, must concur powerfully with a good position to effect union of the divided portions;" yet in the varied motions of the patient, the mere weight of the limb, unsupported by something less yielding than the roller, would be liable to produce curvature, that must ever after remain an irremediable injury to the patient, and an enduring reproach to the surgeon." In view of the very clear notions of the effects and advantages of the roller, in certain fractures, entertained by Boyer, and before his time proclaimed by others, we are not a little surprised, that he failed to apply, the same sound and wholesome principles, to the management of the same accidents in every part of the body, unincumbered by the complicated, inconvenient and painful machinery to which he too often resorted. Take, for example, his treatment of fractured tibia; and we will venture to assert that neither any of his predecessors or successors, have ever devised a plan, more simple in character, or better calculated to promote the comfort of the patient, and to secure the restoration of the limb to

symetry and soundness. "A long compress placed on the anterior part of the leg, and over that a roller or circular bandage, with which the leg being covered, three splints of pasteboard, or thin wood, are applied and bound on by the part of the roller which remained unapplied." The value of this mode of dressing fractures, and its vast superiority over all others, was most ably presented and illustrated by cases, in two essays, by one of the editors of this Journal in the February and April numbers of the present year, to which, we take great pleasure in refering our readers, as the best articles, on the subject of the bandage, that we have had the good fortune to peruse. If our readers will do us the favor to turn again to these essays, they will perceive, that it would be a work of supererogation on our part to extend our remarks on the essay before us; we shall therefore content ourself with a brief analysis of our author's views, accompanied by a very few remarks of our own.

The first paragraphs shadow forth the practical teachings of the whole essay, and as our readers must have already anticipated, these are simple, easily understood, and in strong contrast with the complicated and tormenting machinery too common in former times, to which we have alluded, and which has happily long since gone down to oblivion, or is now only occasionally recalled as warning to ourselves, and as fruitful evidence of the ingenuity of able men, whose whole lives were devoted to ardent and unwearied efforts to alleviate human suffering.

"The benefits arising out of the skillful application of the roller to the treatment of fractures, have at no period of surgical history united the confidence and commendation of enlightened surgeons in a measure commensurate with its merits." So many mischievous errors have been propagated in regard to this fatal agent, "that surgeons have been more watchful to guard against apprehended injuries consequent to its application, than prompt in em-

bracing the advantages of a remedy, which must be classed amongst the most powerful, the least equivocal, and the most rational in the profession."

The objections of our author to fracture machinery, generally, are well laid, and their force will be fully appreciated by all who have attempted to avail themselves of their promised benefits.

The "position of the fractured limb" is a matter of considerable import; and while most surgeons prefer the semiflexed position, experience has demonstrated its inconvenience and impolicy in many cases—as, for example, in fractured patella. Having determined to resort to the roller:

"The time and manner of its application are subjects especially worthy of consideration, and of the exercise of skill. All the muscles, which are to be placed under its control, should be thoroughly extended, provided they are in a state of preternatural contraction, preparatory to the application of the roller; while the force exercised in applying it, must be in proportion to the amount of cellular tissue in the limb, or of the interstitial deposite, which may have been the product of effusion, or of inflammatory action in the part."

An avoidance of "pain and suffering," whether the patient "is resting quietly upon a couch, or subjected to the flying ambulance upon field of battle;" the ease and facility of removing the dressings; the support given to the soft parts, often shocked "beyond their capabilities for healthy reaction;" the control exerted over "destructive inflammatory excitement;" the power to retard mortification and sloughing when present, are offered as so many reasons in support of the Professor's favorite remedy.

Sir Astley Cooper's circular bands, and Mr. Lonsdale's iron clamps in fractured patella, the Professor thinks "render deformity, and imperfect use of the part almost certain;" and beside, he says, eight or ten days must

elapse before the swelling and inflammation are sufficiently reduced, according to these gentlemen, to justify a resort to the means they recommend. Before this can be accomplished such changes may have occurred as utterly to preclude all hope of a perfect reunion.

John Bell was the first to publish the opinion that bony reunion does not take place within a capsular ligament; the same doctrine was taught and published by Sir A. Cooper; but he is not so exclusive, in this matter, as is indicated by our author; nor does he inculcate the necessity of delay, in the application of the bandage, in all cases.

The principle taught by Sir Astley was that "ligamentous union extends to all detached portions of bone within a capsular ligament; its vitality being supported merely by the ligament within the joint," but he distinctly admits the possibility of bony reunion of fractured patella. His attention was attracted to this subject by a discovery made in dissecting a body at St. Thomas's hospital; both patella had been fractured longitudinally, and although the fragments of each were almost in contact, ossific union had taken place in neither. This surprised Sir Astley, and he immediately entered upon a series of experiments, on animals, for the purpose of elucidating this phenomenon. These experiments resulted in proving that the failure of ossific reunion, after fracture of this bone, was owing to more or less separation of the fragments, and that, when they were kept in actual contact, ossific agglutination took place. In compound fracture of this bone, this distinguished surgeon inculcated the wholesome principle that the prime "object is to produce adhesion immediately, and every means in our power must be used to effect it." He applied the bandage without delay, and thus succeeded, with the aid of a few stiches and adhesive strips, in effecting cures in several cases. In recent simple fracture, where no swelling, etc.,

had supervened, there is no material difference between the treatment proposed by Sir Astley, and that pursued by our author; where there was much swelling, the former gentleman did not appreciate the bandage so highly as it deserves, but thought proper to resort to depletion, and evaporating lotions for a few days before a resort was had to the roller. In our opinion, our author is correct in considering the bandage highly useful at every period of the treatment, and when there is much swelling, pain, etc., it is more imperiously demanded than under any other circumstances.

The following is our author's treatment of fractured patella:

"The limb was sponged with warm water, and two rollers were made wet with spirit. A narrow roller was evenly applied, without force, from the toes to the knees, and then made fast. When the superior fragment of the bone had been brought into place by an assistant, with the aid of pressure applied upon the front and upper part of the thigh, a broad roller, after being fixed around the hips, was brought down upon the thigh. With every successive turn of this, the soft parts were pressed gently before it, and finally presented a superfluity about the knee, when this roller was made fast. It now remained to adjust the fragments in apposition, and to give them proper protection. With this view the roller upon the leg was continued over the knee. By oblique turns of this, made to embrace the superior and inferior fragments alternately, they were approximated, and when fairly adjusted, the obliquity of the roller was regularly diminished, until by transverse turns, equable and efficient compression was applied to all points of the surface."

The dressings remained undisturbed until the tenth day, when interstitial absorption had progressed so far as to render their removal and reapplication necessary. "At the end of the third week, ossification between the frag-

ments being complete, the dressings were removed the second and last time." Two weeks afterwards the same bone was refractured, and was subjected to a similar treatment;" at the end of the sixth week ossific union was complete, attended by a profusion of ossific deposits; which disappeared some months after, under the use of the limb."

An exuberent ossific secretion is not an unfrequent attendant on fracture, and "such an accident may be converted into an occasion of confering increased length upon the broken bone."

This is illustrated by reference to cases of "*the bone fellon,*" in which, after the terminal phalanx was "wrenched from its connexions with the capsule, ligaments, and cartilage of the joint," a new and perfect bone, of increased length, was regenerated, under the influence of the bandage.

The roller is believed to present "the greatest security against artificial joint," and, together with friction, the most efficacious remedy for that important accident.

For the rupture of the tendo-Achillis, or of the tendon uniting the patella to the tibia, the same treatment is regarded as altogether sufficient.

Much discussion has arisen in regard to the possibility of perfect reunion after fractures of the cervix femoris; many of the ablest men of the profession have thought recovery without shortening of the limb and lameness impossible; amongst these are Hildanus, Plantner, Ludwig, Louis, Sabatier, Cooper, Bell, etc. Our author correctly sides with Desault, Boyer, and others, who stoutly maintain that a cure without lameness or deformity may be obtained, and also, a perfect consolidation. Dupuytren says that bony reunion in extra-capsular fracture, may and does often take place; as conclusive proof of the truth of this position he confidently appeals to many spe-

cimens preserved in the museum of the Faculty of Medicine, and at the Hospital de la Pitié.

Two of the most common causes of non-consolidation, when the fracture is skillfully dressed, are old age and a complete rupture of the orbicular ligament. Old age is always a serious impediment to the restorative process of nature; and if the orbicular ligament be ruptured, the head of the bone is effectually cut off from all supplies, and of course must die. The operation of these causes, too often overlooked, has probably been principally instrumental in establishing the mischievous error which regards deformity and lameness as the necessary consequences of this accident. Although old age is generally a serious obstacle, yet it should be borne in mind, that it is not always an insuperable bar to perfect recovery; we might cite many cases to establish the requirement of duty—that an effort should always be made to effect consolidation, however advanced in life the patient may be. Boyer happily succeeded with a patient, who was an octogenarian, and our author had a like success, twice with the same patient, who had reached the age of seventy. The following is the treatment pursued by our author.

"A roller of appropriate width, made wet with spirit, was applied smoothly and evenly to the foot and leg, and made fast upon the knee. Another wider roller, prepared in a similar manner, was made fast around the hips, in anticipation of extension and counter-extension."

"When the muscles had fairly yielded to the powers of extension, as was indicated by the restoration of the length of the limb and facility of abduction and adduction of the toes, the bandage upon the hips was brought down over the superior and back portion of the glutei, around the superior part of the thigh, and again over the hips. In each successive turn around the hips, nates and

thigh, care was taken to embrace every portion of the glutei, and deeper seated abductors, together with the opposing muscles on the inner and front portion of the limb. When the pressure here was made equable and uniform in all its bearings, the roller was continued down, and united to that already placed upon the foot, leg, and knee. Although pressure could not be directed immediately upon the psoas, and obturator, the iliacus and pyriformis muscles, involved in this injury; yet the object was accomplished, as in other cases, and by other surgeons where extension and counter-extension is exclusively relied upon; by acting upon the points of their insertion with the roller. The patient was then placed upon his couch, and the rollers were permitted to remain undisturbed for a week, when it became necessary, from the reduced size of the limb, and the loose state of the bandages, to remove and reapply them as before. During a confinement of six weeks, the rollers were removed and reapplied five times, after which he regained the use of his limb, under the effects of gentle exercise upon a crutch."

It is worthy of remark that this cure was effected in less than one half the time usually thought to be necessary to consolidate a fracture of the cervix femoris.

Our author admits the concurrence of all surgeons in the use of the bandage in fractures of the ribs and clavicle; but remarks "that these two species of fracture do not, either of them, exemplify the princinciple upon which its actions depend." The treatment of fractured clavicle is exceedingly simple:

"A sling made of a Bandanna handkerchief; or what may answer a better purpose, a piece of muslin, from three to four feet long and from twelve to fifteen inches wide, with a slit at either end, is proposed with a view to supersede all other dressings."

The following passage imparts a caution which should not be overlooked:

"But the potency of the roller is liable to be abused. Its mischievous effects when applied to inflammatory swellings proceeding from constitutional causes, whether these swellings and inflammations have been invited to the particular location by violence or otherwise, *is* familiarly known; and in such an event the inflammatory action is liable to assume a form not less destructive, and perhaps more painful than the original; even provided a mischievous transfer to parts of more vital importance does not ensue."

Great care is to be exercised, especially in fractures, "attended by extensive laceration of the soft parts, to select a material for the roller, which admits of the most easy access through its texture to the cutaneous surface * * * * the *open coarse cotton*, with a strong thread; surpasses as the material for the roller, all dressings, hitherto suggested in these cases."

The application of a glutinous substance upon the surface of the roller, as has been suggested by some of the French surgeons, is reprobated in strong terms as being well calculated "to divest the remedy of all its virtues."

The following course was successfully resorted to in a case of fistulous abscesses, and an artificial joint about the middle of the humerus:

"The parts were handled with great freedom in order to expel all purulent secretions from the abscesses, and at the same time to cause free and forcible friction between the broken ends of the humerus. So soon as these objects were accomplished, a roller was put on from the fingers to the elbow, and then in a flexed position of this joint, the roller was continued over the elbow and as high as the shoulder. The forearm being placed in a sling, the patient was directed to return the next day."

This dressing was renewed daily for a week, until "the fragments of the bone had become so sensitive as to forbid further disturbance." At the end of the fourth week ossific union was complete.

The following is an interesting, and certainly an extraordinary case:

"Mr. B. was brought on a mattrass to this place, and examined twenty-four hours after having his hand, fore-arm, and arm lacerated and crushed, between a heavy pair of iron cylinders while they were in rapid motion. Several severe lacerations were inflicted on the hand. A lacerated incision extended from a little above, and upon the outside of the wrist, nearly up to the elbow, involving and injuring extensively the interosseous ligament. The radius and ulna were thoroughly ground into small fragments, and these were intermingled.

"By means of the fingers and thumbs of both my hands, all of which were admitted together down to the interosseous ligament; the fragments of *the* one bone of the fore-arm were separated from those of the other; which could not have been accomplished, except through the facilities afforded by the external wound.

"A profound and irreparable injury, consisting in the death of the whole of the integument of the front surface of the fore-arm, was then exposed to view; and as the sequel proved, this was attended by a like condition of the superficial common flexor of the fingers. The humerus was extensively crushed, yet not so much ground up as were the bones of the fore-arm; nor was it a compound fracture. The axilla, the breast, the side, and the shoulder, by checking the impetus of the machinery, suffered great and alarming contusions and exhibited extensive effusion of blood."

"When the injured surfaces had been for half an hour under the influence of hot spirits, as an ablution, the dressings were made ready. These consisted of a roller and two pledgets made wet with spirits, with two narrow splints for the fore-arm, and a roller for the arm."

"Free and frequent ablutions to the whole limb with spirits, were ordered, for the purpose of washing off

ART. VI.—*The Diseases of Females, including those of Pregnancy and Childbed.* By FLEETWOOD CHURCHILL, M. D., author of "The Theory and Practice of Midwifery," and "Diseases of Infants," &c. A new American edition, revised by the author. With the notes of Robert M. Huston, M. D., Professor of Materia Medica and General Therapeutics in the Jefferson Medical College of Philadelphia, &c. Philadelphia: Lea & Blanchard. 1850.

This is the fifth American edition of Dr. Churchill's work on the "Diseases of Females," a fact that speaks expressively of the value of the book. In the present edition, Dr. Churchill says: "The valuable notes of my friend Dr. Huston have been carefully retained, and I have added considerably both to the text and notes, so that I trust it will be found an improvement upon its predecessors."

Dr. Churchill's distinguishing traits as an author are cautious, but copious description of disease, clearness in pointing to the means of diagnosis, and fullness in his therapeutical means. These traits have enabled Dr. Churchill to command the approbation of the medical profession in Great Britain and America. We know of no author who deserves that approbation, on "the diseases of females," to the same extent that Dr. Churchill does. His, indeed, is the only thorough treatise, we know of, on the subject, and it may be commended to practitioners and students as a masterpiece in its particular department.

The former editions of this work have been commended strongly in this Journal, and they have won their way to an extended, and a well deserved popularity. This fifth edition, before us, is well calculated to maintain Dr. Churchill's high reputation. It was revised and enlarged by the author, for his American publishers, and it seems to us, that there is scarcely any species of desirable in-

formation on its subjects, that may not be found in this work.

The American editor, too, has discharged his duty towards this fifth edition. We commend the work as one that should be found in the hands of every practitioner of medicine, and of every student, who has a real desire to adorn a noble profession, by practical talents.

The admirers of Dr. Churchill are indebted to Lea & Blanchard for the very creditable manner in which they have published this book.

Churchill on "The Diseases of Females," may be found at the bookstore of Beckwith & Morton.

Art. VII.—*Surgical Anatomy. Part* 2. By Joseph Maclise, Surgeon. With colored plates. Philadelphia: Lea & Blanchard. 1850.

We have already announced the character and terms of this publication, and we renew a reference to the terms. The work will be published in four parts, containing twelve to sixteen colored plates each, the whole forming one large imperial quarto volume, with about one hundred and fifty double-columned pages.

This is by far the ablest work on Surgical Anatomy that has come under our observation. The London Lancet says, of it: "The practical knowledge of the surgeon, the patience and skill of the dissector, in combination with the genius of the artist, as here displayed, have never before been, and perhaps never will be again associated to a similar extent in the same individual." We cordially join in the whole of this commendation. We knew of no other work that would justify a student, in any degree, for neglect of actual dissection. A careful study of these plates, and of the commentaries on them,

cimens preserved in the museum of the Faculty of Medicine, and at the Hospital de la Pitié.

Two of the most common causes of non-consolidation, when the fracture is skillfully dressed, are old age and a complete rupture of the orbicular ligament. Old age is always a serious impediment to the restorative process of nature; and if the orbicular ligament be ruptured, the head of the bone is effectually cut off from all supplies, and of course must die. The operation of these causes, too often overlooked, has probably been principally instrumental in establishing the mischievous error which regards deformity and lameness as the necessary consequences of this accident. Although old age is generally a serious obstacle, yet it should be borne in mind, that it is not always an insuperable bar to perfect recovery; we might cite many cases to establish the requirement of duty—that an effort should always be made to effect consolidation, however advanced in life the patient may be. Boyer happily succeeded with a patient, who was an octogenarian, and our author had a like success, twice with the same patient, who had reached the age of seventy. The following is the treatment pursued by our author.

"A roller of appropriate width, made wet with spirit, was applied smoothly and evenly to the foot and leg, and made fast upon the knee. Another wider roller, prepared in a similar manner, was made fast around the hips, in anticipation of extension and counter-extension."

"When the muscles had fairly yielded to the powers of extension, as was indicated by the restoration of the length of the limb and facility of abduction and adduction of the toes, the bandage upon the hips was brought down over the superior and back portion of the glutei, around the superior part of the thigh, and again over the hips. In each successive turn around the hips, nates and

thigh, care was taken to embrace every portion of the glutei, and deeper seated abductors, together with the opposing muscles on the inner and front portion of the limb. When the pressure here was made equable and uniform in all its bearings, the roller was continued down, and united to that already placed upon the foot, leg, and knee. Although pressure could not be directed immediately upon the psoas, and obturator, the iliacus and pyriformis muscles, involved in this injury; yet the object was accomplished, as in other cases, and by other surgeons where extension and counter-extension is exclusively relied upon; by acting upon the points of their insertion with the roller. The patient was then placed upon his couch, and the rollers were permitted to remain undisturbed for a week, when it became necessary, from the reduced size of the limb, and the loose state of the bandages, to remove and reapply them as before. During a confinement of six weeks, the rollers were removed and reapplied five times, after which he regained the use of his limb, under the effects of gentle exercise upon a crutch."

It is worthy of remark that this cure was effected in less than one half the time usually thought to be necessary to consolidate a fracture of the cervix femoris.

Our author admits the concurrence of all surgeons in the use of the bandage in fractures of the ribs and clavicle; but remarks "that these two species of fracture do not, either of them, exemplify the princinciple upon which its actions depend." The treatment of fractured clavicle is exceedingly simple:

"A sling made of a Bandanna handkerchief; or what may answer a better purpose, a piece of muslin, from three to four feet long and from twelve to fifteen inches wide, with a slit at either end, is proposed with a view to supersede all other dressings."

The following passage imparts a caution which should not be overlooked:

"But the potency of the roller is liable to be abused. Its mischievous effects when applied to inflammatory swellings proceeding from constitutional causes, whether these swellings and inflammations have been invited to the particular location by violence or otherwise, *is* familiarly known; and in such an event the inflammatory action is liable to assume a form not less destructive, and perhaps more painful than the original; even provided a mischievous transfer to parts of more vital importance does not ensue."

Great care is to be exercised, especially in fractures, "attended by extensive laceration of the soft parts, to select a material for the roller, which admits of the most easy access through its texture to the cutaneous surface * * * * the *open coarse cotton*, with a strong thread; surpasses as the material for the roller, all dressings, hitherto suggested in these cases."

The application of a glutinous substance upon the surface of the roller, as has been suggested by some of the French surgeons, is reprobated in strong terms as being well calculated "to divest the remedy of all its virtues."

The following course was successfully resorted to in a case of fistulous abscesses, and an artificial joint about the middle of the humerus:

"The parts were handled with great freedom in order to expel all purulent secretions from the abscesses, and at the same time to cause free and forcible friction between the broken ends of the humerus. So soon as these objects were accomplished, a roller was put on from the fingers to the elbow, and then in a flexed position of this joint, the roller was continued over the elbow and as high as the shoulder. The forearm being placed in a sling, the patient was directed to return the next day."

This dressing was renewed daily for a week, until "the fragments of the bone had become so sensitive as to forbid further disturbance." At the end of the fourth week ossific union was complete.

The following is an interesting, and certainly an extraordinary case:

"Mr. B. was brought on a mattrass to this place, and examined twenty-four hours after having his hand, fore-arm, and arm lacerated and crushed, between a heavy pair of iron cylinders while they were in rapid motion. Several severe lacerations were inflicted on the hand. A lacerated incision extended from a little above, and upon the outside of the wrist, nearly up to the elbow, involving and injuring extensively the interosseous ligament. The radius and ulna were thoroughly ground into small fragments, and these were intermingled.

"By means of the fingers and thumbs of both my hands, all of which were admitted together down to the interosseous ligament; the fragments of *the* one bone of the fore-arm were separated from those of the other; which could not have been accomplished, except through the facilities afforded by the external wound.

"A profound and irreparable injury, consisting in the death of the whole of the integument of the front surface of the fore-arm, was then exposed to view; and as the sequel proved, this was attended by a like condition of the superficial common flexor of the fingers. The humerus was extensively crushed, yet not so much ground up as were the bones of the fore-arm; nor was it a compound fracture. The axilla, the breast, the side, and the shoulder, by checking the impetus of the machinery, suffered great and alarming contusions and exhibited extensive effusion of blood."

"When the injured surfaces had been for half an hour under the influence of hot spirits, as an ablution, the dressings were made ready. These consisted of a roller and two pledgets made wet with spirits, with two narrow splints for the fore-arm, and a roller for the arm."

"Free and frequent ablutions to the whole limb with spirits, were ordered, for the purpose of washing off

bloody effusions from the surface of the dressings; which were not removed until the twelfth day."

At the end of four months "the wound was cicatrised and the dressings discontinued;" the use of the arm and hand was almost perfectly restored.

Fractures of the fore-arm should always be dressed with the hand in supination, and to secure this position, care should be taken to apply the roller from the ulnar side over the front of the arm. Suitable compresses, to preserve the proper space between the two bones, should never be neglected.

The essay under review, contains several very interesting and instructive cases, which we should be pleased to present to our readers, but they are scarcely susceptible of condensation, and our space will not permit us to give them in full. They all, however, teach one doctrine, that no case can be so desperate—no laceration so extensive and terrible, as to preclude the hope of preserving the limb under the influence of the bandage.

We do not feel an implicit faith in the roller alone in all cases, but we are convinced that in most fractures, with the aid of a few simple splints of stiff pasteboard or thin wood, it is infinitely superior to all the fracture machinery ever invented, being alike simple in its application, always accessible, safe and comfortable to the patient, and serving as an effectual bar to many of the most distressing and troublesome accidents that so frequently complicate these injuries.

Our author is not original in the application of the roller in the treatment of fractures, but he stands almost or quite alone in discarding all other means. While a vast majority of surgeons have resorted to more or less machinery in dressing fractures, many of the ablest writers, from Galen to the present day, have borne testimony to the potency of the bandage, and simplicity in the management of these accidents has now become almost uni-

versal. We have not deemed a reference to these authorities necessary, on the present occasion, inasmuch as they have already spoken in the two essays of Dr. Bell, to which we have invited the attention of our readers. We may be indulged, however, in quoting a paragraph from Dr. Bell, while we refer to his essays for the numerous citations by which he has abundantly fortified his position:

"From the days of Hippocrates and Galen, down to the present, through all the varying schools that have lived and perished, through all the wild, fanciful and chimerical systems and theories that have been in vogue, as well as among the most truthful and observant of sects, the bandage has steadily maintained its position, as, at once, not only the most useful and valuable of all agents for its purposes, but the one of all others, capable of the most general and extensive use. The highest authorities in all ages of medicine, have constantly endeavored to bear testimony to its great qualities, and many of the old surgeons had as clear and extended views of its multiform capacity for a great variety of surgical purposes, as any of the most enlightened among the moderns. Why should there, then, be any hesitation about the use of a remedy thus commended? If the accumulated experience of many centuries is of any service, why seek to deviate from that plain faith that is studded with monuments of success, and that has all the leading lights of the medical profession playing upon it?" C.

ART. VI.—*The Diseases of Females, including those of Pregnancy and Childbed.* By FLEETWOOD CHURCHILL, M. D., author of "The Theory and Practice of Midwifery," and "Diseases of Infants," &c. A new American edition, revised by the author. With the notes of Robert M. Huston, M. D., Professor of Materia Medica and General Therapeutics in the Jefferson Medical College of Philadelphia, &c. Philadelphia: Lea & Blanchard. 1850.

This is the fifth American edition of Dr. Churchill's work on the "Diseases of Females," a fact that speaks expressively of the value of the book. In the present edition, Dr. Churchill says: "The valuable notes of my friend Dr. Huston have been carefully retained, and I have added considerably both to the text and notes, so that I trust it will be found an improvement upon its predecessors."

Dr. Churchill's distinguishing traits as an author are cautious, but copious description of disease, clearness in pointing to the means of diagnosis, and fullness in his therapeutical means. These traits have enabled Dr. Churchill to command the approbation of the medical profession in Great Britain and America. We know of no author who deserves that approbation, on "the diseases of females," to the same extent that Dr. Churchill does. His, indeed, is the only thorough treatise, we know of, on the subject, and it may be commended to practitioners and students as a masterpiece in its particular department.

The former editions of this work have been commended strongly in this Journal, and they have won their way to an extended, and a well deserved popularity. This fifth edition, before us, is well calculated to maintain Dr. Churchill's high reputation. It was revised and enlarged by the author, for his American publishers, and it seems to us, that there is scarcely any species of desirable in-

formation on its subjects, that may not be found in this work.

The American editor, too, has discharged his duty towards this fifth edition. We commend the work as one that should be found in the hands of every practitioner of medicine, and of every student, who has a real desire to adorn a noble profession, by practical talents.

The admirers of Dr. Churchill are indebted to Lea & Blanchard for the very creditable manner in which they have published this book.

Churchill on "The Diseases of Females," may be found at the bookstore of Beckwith & Morton.

Art. VII.—*Surgical Anatomy. Part* 2. By Joseph Maclise, Surgeon. With colored plates. Philadelphia: Lea & Blanchard. 1850.

We have already announced the character and terms of this publication, and we renew a reference to the terms. The work will be published in four parts, containing twelve to sixteen colored plates each, the whole forming one large imperial quarto volume, with about one hundred and fifty double-columned pages.

This is by far the ablest work on Surgical Anatomy that has come under our observation. The London Lancet says, of it: "The practical knowledge of the surgeon, the patience and skill of the dissector, in combination with the genius of the artist, as here displayed, have never before been, and perhaps never will be again associated to a similar extent in the same individual." We cordially join in the whole of this commendation. We knew of no other work that would justify a student, in any degree, for neglect of actual dissection. A careful study of these plates, and of the commentaries on them,

would almost make an anatomist of a diligent student. And to one who has studied anatomy, by dissection, this work is invaluable, as a perpetual remembrancer, in matters of knowledge that may slip from the memory. The practitioner can scarcely consider himself equipped for the duties of his profession, without such a work as this, and this has no rival, in his library. In those sudden emergencies that so often arise, and which require the instantaneous command of minute anatomical knowledge, a work of this kind keeps the details of the dissecting room, perpetually fresh in the memory. We appeal to our readers, whether any one can justifiably undertake the practice of medicine, who is not prepared to give all needful assistance, in all matters demanding immediate relief.

We repeat that no medical library, however large, can be complete without Maclise's Surgical Anatomy. The American edition is well entitled to the confideuce of the profession, and should command, among them, an extensive sale. The investment of the amount of the cost of this work, will prove to be a very profitable one, and if practitioners would qualify themselves, thoroughly, with such important knowledge as is contained in works of this kind, there would be fewer of them sighing for employment. The medical profession should spring towards such an opportunity as is presented in this republication, to encourage frequent repetitions of American enterprise of this kind.

ART. VIII.—*A Treatise on Baths; including Cold, Sea, Warm, Vapour, Gas, and Mud Baths; also, of the Watery Regimen, Hydropathy, and Pulmonary Inhalation; with a Description of Bathing in Ancient and Modern Times.* By JOHN BELL, M. D., formerly Lecturer on the Institutes of Medicine, and on Materia Medica. Philadelphia: Barrington & Haswell. 1850.

There could scarcely be a more opportune publication than this. Between ignorance of the real and valuable uses of water, as a remedial agent, and the fear of being considered followers of Priessnitz, the profession has been avoiding the use of water, as a remedy, and in that way losing a valuable agent in curing many diseases. We have always regarded Currie's reports as one of the standard works, of practical medicine, that is destined to retain the confidence of all who read it. It is a book that deserves very careful study, and even the student who may read the excellent treatise before us, may turn from its classical, eloquent, and practical pages, to Currie's Reports, and feel his mind refreshed.

This work of Dr. John Bell, on Dietetical and Medical Hydrology, is the only treatise on the subject, in the English language, that may be considered a complete one. In addition to the valuable details of the work, that are the result of the author's own observations and reasonings, he has laid M. Gaudet's interesting Treatise on Sea Bathing, and the work of M. Rapou on Vapour Baths, under contribution. In this way, Dr. Bell says: "American readers are put in possession of a body of instructive matter not hitherto accessible in an English dress."

The former work of Dr. Bell: "On Baths and Mineral Waters," published in 1831, commanded the confidence of the profession throughout the country. The work on our table, however, is entitled to a much more extended approval. The author "has enlarged on all the topics of

his former work, and has added new ones—so far as relates to baths and bathing." So great is the enlargement of the present work; it is so much more copious, thorough, and useful than the work of 1831, that it may almost, be regarded as a new treatise.

We are persuaded that there is too much neglect of the use of cold water, both in practical medicine, and in surgery. In many cases of fever, in various affections of the head and spine, and in a great variety of injuries that require surgery, cold water is invaluable. We have never been able to imagine how a physician can endure and encourage the agonies of a patient, in fever, whose parching thirst cries incessantly for cold water. There is scarcely any article of the Materia Medica more prompt and efficient, in relieving a febrile paroxysm; there is certainly no one more grateful to the patient. But an absurd prejudice, which has no foundation in fact, interdicts the use of cold water, when the patient is taking mercury. We have a great confidence in the powers of calomel, but if the foolish prejudice, of which we speak, had any authority over us, we should promptly give up the calomel, and depend upon the cold water as the greatest remedy of the two. How it ever happened that the notion came into use, that calomel salivates because cold water is used, we do not know. We have seen many more persons salivated, who confined themselves to warm drinks, than those who used the cold water. For twenty years we have urged upon patients the value of cold water drinks, while undergoing the use of calomel or blue mass, and so far from having seen any cause to regret it, we have found abundant sources of gratification. Any one who will use his reason, instead of depending on "old wives' fables," may find satisfactory reasons why the use of cold water drinks, in connection with mercurial treatment, in febrile or inflammatory conditions, will prevent salivation. The whole subject may be thrown

into a syllogism, consisting of well established truths—if calomel purges freely, it is not very likely that it will act on the salivary glands—it cannot purge well, if the febrile or inflammatory symptoms are above the secreting point, and the lancet itself is not a more powerful agent, for reducing the excessive actions of the arterial system, than cold water—the sequence is clear, cold water can and does prevent salivation, but ptyalism may come on, despite of the cold drinks; we know it often does, when they are avoided.

We are much gratified with the remarks of Dr. Bell on the use and various values of cold water drinks, and we hope his sentiments will exert a wide-spread influence over the profession. A work of this kind was much needed on this very point, and it could not have been undertaken by a more competent man. We are wedded to the use of cold drinks, by personal experience. For thirty years and upwards, we have undergone an amount of toil, endurance, and exposure that few have experienced. We have thrived on four hours sleep in the twenty-four; we never knew a leisure hour yet, we have arduously engaged for twenty years in the practice of medicine, in drenching rains, snow storms, sultry heats, repeated losses even of the pittance of sleep claimed as due, and through all, have maintained almost uninterrupted health. And we know no more of the taste of alcoholic drink, than if there never had been such a thing known. Not a drop of anything of the kind has ever been in our mouth. Nor, save at the communion table, do we know the taste of wine. But any deficiences of these privileges have been more than made up in an intense love of cold water, and no toper ever revelled in the love of his intoxicating dram, more than we do in the love of a glass of cold water. To the free use of that drink, we owe unusual health, in the midst of the many physiological sins, we are forced to commit.

We love cold water in the same way that old Peale said he loved brandy—internally, externally, and eternally.

We cordially commend the work of Dr. John Bell on "Dietetical and Medical Hydrology," to the profession. It is a work of rare and unusual merit. It is classical in its style, pleasing and instructive in its varied details, and exceedingly practical in all its departments.

We owe many thanks to the publishers, Barrington & Haswell, for the very excellent manner in which they have published this work. It is one of the most beautiful publications we have seen; excelling in typography and tastefulness, even Putnam's editions of Washington Irving's works. This beautiful volume is as well fitted for display in a lady's *boudoir*, as upon the shelves of a library, and the mind drinks in the pleasant knowledge of the author, with additional delight arising from the tastefulness of the goblet from which it flows.

These works, Maclise's Surgical Anatomy, and Bell on Baths and Watery Regimen, may be found in the excellent collection of medical books, at the bookstore of Beckwith & Morton.

SELECTIONS

FROM

AMERICAN AND FOREIGN JOURNALS.

Regeneration of the Sciatic Nerve.—M. Brown Séquard recently exhibited to the Biological Society of Paris a Guinea-pig, in which the sciatic nerve had been completely divided twelve months previously. A month after the operation, indications of a return of sensibility had begun to present themselves; within another month, the sensibility had decidedly augmented, but was still much inferior to that of the sound limb; the muscles had then begun again to act. Six months after the section, the sensibility appeared to have returned completely, and the motor power to have been almost entirely recovered; and at the end of about eleven months, no difference could be discovered in the motor power of the two limbs. The animal having been subsequently killed, a careful examination was made of the part of the nerve where the section had been made; and the restoration of the original state was so complete, that no indication of the division could be discovered, either with the naked eye, or with the microscope. The usual swelling at the point of reunion had been distinguishable up to about the sixth month; but it had then disappeared.—*B. and For. Med. Chir. Rev.*, Jan., 1850, from *Gazette Médicale de Paris*, No. 45.

Pathological Changes that Follow Section of the Sciatic Nerve.—In the same number of the British and Foreign Medical Chirurgical Review, M. Brown Séquard calls in

question the inference that certain patholigical changes, which follow the section of the sciatic nerve, show the dependence of the nutritive operations upon nervous agency. The following facts and reasonings, seem to be conclusive:

"M. Séquard found that section of the nerve in frogs produced no pathological change whatever, save the atrophy consequent upon the paralysis, except when water found its way into the wound. He then divided the nerve in a number of rabbits and guinea-pigs, and placed some of the animals at liberty in a room with a paved floor, whilst he confined others in a box, whose bottom was thickly covered with bran and hay. In a fortnight, the former set exhibited an obvious disordered action in the paralyzed limbs; the claws were entirely lost, the extremities of the feet were swollen, and the exposed tissues were red, engorged, and covered with fleshy granulations. At the end of a month, these alterations were more decided; and a necrosis had supervened in the denuded bones. On the other hand, in the animals confined in the boxes, no such injuries had accrued. It is obvious, therefore, that these changes do not proceed directly from section of the nerve; but that they are consequent upon the friction and compression to which the paralyzed members are subject against a hard soil, in consequence of the inability of the animal to feel or avoid it."

Experiments on the Use of Salt.—M. Plouviez recently presented a memoir to the Academy of Medicine, detailing the results of a series of experiments he has been engaged upon, with the view of determining the part which salt plays in alimentation. To insure accuracy, he had to make choice of persons who led regular lives, continued their habitual mode of alimentation, took the salt at a meal it is not usually taken at, viz.: in the morning, (with milk,) and were weighed before, after, and during the intervals of the experiments. He found more than 25 persons who fulfilled these conditions; but he does not detail the experiments made upon these, as the results only differed in some shades from those observed upon

himself. Some of the persons experimented upon, increased in weight from 500 to 2500 grammes in 30 days, and that only from the daily use of from 6 to 10 grammes of salt. Others increased from 5,000 to 10,000 grammes in three or four months. Some acquired more strength and vigour, without any of the inconveniences of excess of nutrition, while others suffered from all the inconveniences of plethora, until the regimen was changed. The nutritive power of the salt was always most observable in feeble, lymphatic subjects. The experiments would at first seem to support the opinion of those who state that 1 lb. of salt will produce 10 lbs. of flesh; but if the regimen is continued from 5 to 10 months or more, the progressive increase of weight is no longer observed, a stationary condition ensuing, the blood being now as rich and nutrition as complete as possible. This fact explains the opposite conclusions arrived at by different observers. The appetite is sometimes found to increase during the first 8 or 10 days, then to resume its normal condition, and after the first or second month to diminish. The most general and certain effect is the increase of the strength; heat is more readily generated, and the exposure to cold better borne.

M. Plouviez's experiments upon himself were commenced in May, 1842, when he weighed 75 kilogrammes. Beginning with a teaspoonful, he increased it to a tablespoonful (from 4 to 6 grammes,) and continued this daily for 4 months. By the end of June his strength and weight (80 kilogrammes,) had both augmented. By the end of July he found himself heavy and oppressed, and this feeling increasing, he was bled the 30th of August—his weight having by this time increased to 85 kilogrammes. During September he suspended the use of the salt, and finding, on resuming it again in October, that his head again became oppressed, he was bled a second time. He made no further experiments on himself during 1843–'45, during which period his weight continued at 83 kilogrammes.

Resuming the experiment again November 1st, 1846, he took until the 2d of December 4 or 5 grammes daily, and from the 3d of December 10 grammes—his weight increasing to 85 kilogrammes. The former symptoms of determination to the head coming on, he was bled on the

28th, and the blood analyzed by M. Poggiale. He then resumed his ordinary regimen for 66 days, lost 2 kilogrammes in weight, and feeling quite well, was again bled, in order that his blood might be again analyzed. The two analyses gave the following results:

	First Analysis.	Second Analysis.
Water	767.60	779.92
Globules	143.00	130.08
Fibrine	2.25	2.10
Albumen	74.00	77.44
Fatty matters	1.31	1.13
Salts and extractive	11.84	9.33

In the first analysis 6.10 of chloride of soda, and 1.50 oxide of iron were found, and in the second 4.40 chloride of soda and 1.26 oxide of iron.

On the 4th of June, 1847, he resumed the use of the salt, and by the 22d of August had regained his weight of 85 kilogrammes, and was bled in consequence of giddiness. He omitted it, with loss of weight, until the 20th of September, when he resumed it, and reacquired the weight by the 26th of October. He now left off the salt until January, 1848, and then continued it, with intervals of suspension, until February, 1849, the same results being observed. From March to July he suppressed the use of all salt at his meals, and found as the result a loss of weight and a feeling of debility produced.

M. Plouviez in an accompanying note, states that he regards salt: 1. As a condiment until it enters the stomach. 2. As reacting through its bases upon this viscus, and the intestinal canal. 3. As increasing the quantity of chyle by its action on the elements of the chyme. 4. As an excitant of the intestinal absorbents. 5. As a useful modifier of the blood, by diminishing the proportion of its water. 6. As a principal agent in the solution of albumen and fibrine. 7. As one of the agents tending to produce or increase the globules. 8. As a powerful coadjutor in the act of hematosis, without the aid of which the blood does not become reddened in its contact with oxygen. 9. As a valuable auxiliary in the intimate acts of assimilation and deassimilation.

M. Robinet, in reporting upon the memoir reserves his opinion of its scientific value, but does not hesitate to

compliment the author for his devotion in having thus undergone a saline regimen during 735 days, spread over 25 months of three different years, leading on several occasions to so much indisposition as to call for blood-letting. *Brit. and For. Med.-Chirurg. Rev.*, Jan., 1850, from *Bulletin de l' Acad. de Med.*, tom. xiv. pp. 1028, 1077–'80.

On the Identity or Non-identity of Typhoid Fever, Typhus Fever, and Relapsing Fever. By W. JENNER, M. D., Professor of Pathological Anatomy, University College, London, (*Proceedings of the Royal Medical and Chirurgical Society*, Dec. 11, 1849.)—The author, at the commencement of his paper, remarks that, for many years, small pox, measles, and scarlet fever were confounded under one name, and that it was only after the publication of Dr. Withering's essay, that measles and scarlet fever were regarded as distinct affections—i. e., distinct as to their course, their symptoms, their lesions, and their causes. Typhus fever, typhoid fever, and relapsing fever are yet by many looked on but as varieties of one disease. But the writings of Dr. Gerhard, M. Valleix, and Dr. A. P. Stewart, have rendered it highly probable that typhoid fever and typhus fever are absolutely distinct from each other—two species of disease, and not varieties of one affection. In the Monthly Journal of Medicine of the present year, the author has analyzed the course, symptoms, and lesions of structure found after death in a certain number of cases of fever, and this analysis, he thinks, proves that, as regards their course, symptoms, and lesions, no two diseases can be more distinct than typhus and typhoid fever. But small pox, measles, and scarlet fever differ also in respect of their exciting cause, which, in the case of each of these diseases, is specific. In like manner, typhoid fever, typhus fever, and relapsing fever must require for their production the application of distinct specific causes, if they be distinct diseases. To inquire whether the specific cause of each of these diseases is distinct, or whether the cause of all these is the same, is the author's object in the present paper. He first describes the peculiarities of the course and symptoms of relapsing fever, and of the skin eruption of

typoid fever and of that of typhus fever, on which the diagnosis of these diseases rests. He then gives three tables, showing all the instances in which two or more cases of fever were admitted from one house into the London Fever Hospital in the years 1847, 1848, and 1849; the age, sex, and degree of intimacy of the individuals, as well the nature of the disease under which they labored; and for the years 1848 and 1849, the number of all cases of fever admitted into the Fever Hospital during the separate months, with the rash of typhoid fever and that of typhus fever respectively. The results exhibited in these tables are: 1st. That, in 1847, there were five instances of the admission of two or more cases of typhus fever from the same house, two instances of the admission of two cases of typhoid fever from the same house, and five instances of the admission of two cases of relapsing fever from the same house, and not a single instance of cases of the three diseases, or even of two of them, coming from the same locality. 2d. That, in 1848, two or more cases of typhus fever were admitted from each of thirty-three houses, and two cases of typhoid fever from each of four houses; while there was only one instance of a case of typhus and one of typhoid fever being admitted from one house; and in this exceptional instance there is reason to believe the patients received their diseases from different sources. 3d. That, in 1849, two or more cases of typhus fever were admitted from each of eighteen separate localities; and two or more cases of typhoid fever from each of four localities; while in not a single instance was a case of typhoid fever and a case of typhus fever admitted from the same house. 4th. That, in 1847, the relapsing fever, typhoid fever, and typhus fever, and, in 1848 and 1849, the typhus and typhoid fevers, prevailed simultaneously in the metropolis; and, nevertheless, that the cases of these several diseases came to the hospital from distinct localities. In 1848, there were received into the fever hospital 118 cases of fever with the rash of typhoid fever, and 390 with the rash of typhus fever; in 1849, 118 with the rash of typhoid fever, and 143 with the rash of typhus fever. As, therefore, about one-fourth of all the cases of fever admitted in 1848, and nearly half of those admitted in 1849, were cases of typhoid fever, the author argues that, in

the numerous instances in which two or more cases were admitted from one locality, cases of typhoid fever ought to have been mingled indifferently with cases of typhus fever, in about their proportion in the two years, if the cause of the two diseases were identical; while, as has been shown, from all the localities which yielded cases of typhus, there came but one case of typhoid fever. He remarks, moreover, that an increase of the epidemic prevalence of one of these kinds of fevers had no influence in increasing or diminishing the absolute number of cases of the other kind of fever; that no transition-cases were observed, marking the passage of one epidemic constitution into another; that the rash of typhoid fever and that of typhus fever were not modified in their characters by variations in the prevalence of other kinds of fever; and that the absence or presence of lesion of Peyer's patches and the mesenteric glands always corresponded with the symptoms of the particular cases during life, and did not depend on the epidemic constitution. The author then adduces some particular instances, in which a succession of cases, coming from the same locality, or apparently arising from the same cause, all presented the same characters. And, in conclusion, he remarks that the facts contained in this paper appear to him to prove, incontestably, that the specific causes of typhus and typhoid fevers are absolutely different from each other; and to render it in the highest degree probable that the specific cause of relapsing fever is different from that of either of the two former.

In the debate which followed, Dr. Jenner stated that, like others, he had seen cases of typhoid fever in which there was no eruption; and he spoke now of the spots, when present, only as a means of diagnosis. It must be remembered that in scarlet fever and measles the exanthem was occasionally absent; and this would serve to point out the inconsistency of those who sought to associate typhus and typhoid fevers, because occasionally there was no eruption. The mulberry spots in typhus, at first, in many cases, bore a close resemblance to the rose-colored spots of typhoid fever; so that in a few cases they might be regarded as exactly similar. His experience, however, fortified by 2,000 cases, enabled him to assert that if, by the eighth day of the disease, the erup-

tion presented the true typhous character, then, if death ensued, intestinal lesions would not be discovered. Dr. Baly's cases, to be of any service in determining the diagnostic value of the eruption, must be confined to the fatal cases, where the after-death appearances were described: and these appearances had not been mentioned by him. With regard to the opinions of Dr. Crawford, respecting the influence of impurity of the atmosphere and locality on the eruption, he might state that the Fever Hospital received patients from all parts of London, and its neighborhood. Personal observation of houses, in these various localities, had not enabled him to observe any difference in their hygienic conditions. It must be self-evident, that no very great impurity of atmosphere existed in the Fever Hospital, when no such change as that mentioned by Dr. Crawford, he (Dr. Jenner) could distinctly deny, ever occurred. He agreed with Dr. West, that infantile remittent fever was really typhoid, and never gave rise to typhus. He reminded Dr. Stewart that, in his published essays, he had described a fatal case of typhoid fever from relapse, in which the eruption appeared for the second time. The fact of Dr. Christison having suffered three times from typhus fever was no evidence that typhus fever occurred more frequently than typhoid fever in the same person; because he might have had the three different forms of fever under discussion, all of which Dr. Christison might regard as simple continued fever. After some remarks on the concurring testimony of Dr. Gerhard, Dr. Shattuck, Dr, Stewart, and himself, respecting these fevers, he observed that it was a frequent occurrence, in the Fever Hospital, for patients affected with typhus and typhoid fevers to lie side by side in the same ward, each disease preserving its own peculiar symptoms.

THE WESTERN JOURNAL.

THIRD SERIES.—VOL. V.—No. VI.

LOUISVILLE, JUNE 1, 1850.

DEMONSTRATIVE MIDWIFERY.

We are gratified in seeing that the Medical Journals, of this country are expressing themselves very properly upon the recent *emeute* got up in Buffalo, by some seventeen physicians, on the subject of demonstrativ midwifery. In addition to the remarks made in the May number of this Journal, very excellent and appropriate editorials have appeared in the New York Journal of Medicine, the New Orleans Medical Journal, and the Western Lancet, published at Cincinnati. They all speak approvingly of the course of the Professor of Obstetrics, in the Buffalo Medical School.

It is a matter of surprise and sorrow to us, that even seventeen medical men in one city, could be induced to sign such a letter as the one addressed to Prof. Austin Flint, and to the character of which we referred in our last number. We can easily imagine precisely such professional *esprit du corps*, and enterprise, as were exhibited by the immortal seventeen at Buffalo, manifesting itself in Rome, against Galen's desires for anatomical knowledge. A letter could easily have obtained numerous signatures, denouncing *post mortem* examinations, and dissections of the human body, as "unprofessional in manner, grossly offensive, alike to

morality and common decency," subversive of the public virtue, and an outrage upon the gods. There is but little doubt, that just such exemplars of professional honor, advancement, and utility, as are to be found in Buffalo, were among those great names in the medicine of Rome, who drove Galen away from the city, and kept him down, until the fires of his genius consumed the moths that flitted around the flames of the reputation of the illustrious Greek.

Dr. Wm. Shippen had to stem the tide of just such absurd and groundless prejudices, as the Buffalo medical protestants urge, when he attempted to *practice* midwifery in Philadelphia. A great outcry was raised against the illustrious Shippen—his attempt was looked upon as "unprofessional in manner, and grossly offensive to morality and common decency," but Shippen survived these "ghostly rappings," and paved the way to the very general employment of male accoucheurs. By the way, would it not be well enough for the seventeen Buffalo gentlemen to consult the Rochester rapping folks, on what is "unprofessional in manner, and grossly offensive alike to morality and common decency?" Our Buffalo indignants should remember too, how nearly Cotton Mather and Boylston came to the loss of their lives by introducing inoculation. The "inflammatory" doctors of the day appealed to the "masses" and raised a storm.

The various medical journals, we have named above, take strong ground in favor of the utility of demonstrative midwifery. In connection with that point we have no kind of hesitation in saying, that there is no department of medical teaching, in which demonstrations—actual clinics, are more important. The eloquence of Buffon could not pourtray by description, to an adult, anything like as correct an idea of an elephant, as a child would acquire from a few moments' view of the living animal; nor could all the teaching of Cazeaux or Churchill convey to students such ideas of the mechanism of labor, as they would derive from attendance upon one case. We have been often requested by students of the medical school, of this city, for permission to attend upon some case of obstetrics with us, and opportunities have occasionally occurred for granting the privilege. Some of these students were young men who had graduated with great honor, and who could describe all of Baudalocque's presentations with the most perfect accuracy, but when they examined for the particular presentation in the living case, they were unable to tell whether they were about to encounter a hip, shoulder, or head presentation. And these gentlemen have all declared that

they derived more useful knowledge from the actualities of a labor, than from all their previous instruction. Mannikin instruction is but the shadowy form of an obstetrical clinic; the living case is absolutely essential, to the proper preparation of a graduate, for passing into practice, and all efforts for paving the way towards an extended series of demonstrative midwifery, should be hailed by the profession, and by the public as laudable, and worthy of all honor and praise. The law is fierce upon forced resources for dissection, but neither the law, nor public sentiment attempts to disturb those voluntary gifts that are occasionally bestowed upon the anatomist. And this marks the line for demonstrative midwifery. If females can be found, who are willing to make themselves a part of a successful course of obstetrical instruction, they should be encouraged in the good work, and those *medical* men, who attempt to obstruct such progress, and who, with incendiary motives, talk of getting up mass meetings on the subject, deserve to be branded as unworthy members of a noble profession, and as recreants to the cause of science. They are "unprofessional in manner and grossly offensive, alike to morality and common decency." It is the duty of every medical man to advance his profession by every means in his power, and all the resources of teaching will never boast of preparing neophytes, too well for practice.

On the subject of the morality of demonstrative midwifery, we expressed our views in the May nnmber of this Journal, and we are convinced that demonstrative midwifery may be so conducted as to be of vast utility to students, and be quite as moral as a lecture upon chemistry. Those females who may be induced to submit themselves for demonstration are not necessarily immoral, there is no kind of immorality in the teacher's desire to thoroughly qualify his students, and there can be none in the aspirations of the students after knowledge that is of the highest importance to them. Where then is the possibility of wrong to any one, or to anything in this matter? We hope to see the day when demonstrative midwifery will be an essential part of medical teaching, and that day will assuredly come, as certainly as other clinical teaching has come to be regarded as necessary. The necessity now felt, every where for hospital instruction—a necessity that is driving medical schools to large cities, will grow until demonstrative midwifery is placed upon a secure basis.

The prudish "Miss Nancies," of Buffalo, have, unintentionally, conferred a benefit on the medical profession. Their excessive modesty and

shame-facedness have aroused attention to the subject of clinical midwifery, and this attention will urge forward the good work. We can easily imagine an innocent, childlike simplicity, that would put pantalets upon the legs of a piano, and that would screen with a veil, everything capable of exciting prurient ideas, but we do not like to see this excessive flirtation with modesty, introduced into medical teaching. A misplaced irritation of the blushing organs operated upon the seventeen Buffalo doctors, and induced them to ease their tender consciences, by a protest. May the Heavens smile serenely over their innocent slumbers! But while they sleep with Rip Van Winkle devotion, or with Barney O'Rierdon's "attention," we pray them not to disturb medical teaching with their snoring. They may sleep as much as they please, but the profession should be awake. The oil in the lamps of the "seventeen" foolish virgins may burn out, but we wish to see the lights of the profession continually replenished, so that perpetual lamps may be lighting the path of progression.

An Historical Sketch of the State of Medicine in the American Colonies, from their first Settlement to the Period of the Revolution. By John B. Beck, M. D., Professor of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons, in the city of New York, &c. Second edition. 1850.

We cordially thank Dr. Beck, for this interesting brochure, the title of which heads these romarks. The author has redeemed much valuable matter from oblivion, and presents it to the profession in a fascinating form. The pamphlet contains a record of the pioneers of the medical profession, on this continent, and of many noble spirits and burning lights in their ranks. As a contribution towards a history of the North American medical profession, we hail this pamphlet with sincere satisfaction. The sketches of Drs. Morgan, Lloyd, Wm. Shippen, Mitchell, of Virginia; Lining, Douglass, of Boston; Ogden, Thomas, of Virginia; Manson, Bayley, Chalmers, Gardue, Clayton, of Virginia; Tennent, a relation of Dr. Richard Neade, of London; Cadwallader, Bond, Colden, Bard, Middleton, Jones, of New York; are full of interest. We acknowledge ourself indebted to Dr. Beck, for some delighted reading hours.

DR. DRAKE'S TREATISE.

The first volume of Dr. Drake's long expected work has at length made its appearance, under the title of "*A Systematic Treatise, Historical, Etiological, and Practical, on the Principal Diseases of the Interior Valley of North America, as they Appear in the Caucasian, African, Indian, and Esquimaux Varieties of its Population,*" and, in advance of a more extended notice which we hope to prepare for our next number, we hasten to give our readers our first impressions of the work. We have for a number of years been familiar with the plan of this treatise, having seen several of its first chapters in manuscript. We have been apprised of the extraordinary labor of its author in collecting the materials of which it is composed. We fully understood, all along, that it was no part of his design to compile a treatise from the published works of others, but to explore for himself the sources of disease in the great interior valley, and to record his own experience and that of his brethren, touching the disorders incident to that region. The plan is an enlarged one and imposed a task of vast magnitude upon its author. In the fulfilment of it, he has found it necessary to visit every quarter of this extended region, from the Gulf of Mexico to the Lakes, and from the brow of the Appalachians as far West as civilization has reached towards the Rocky Mountains. Thus aware of the energy and laborious industry with which its gifted author was devoting himself to his work, we have looked forward to its completion with deep interest and with large expectations.

These expectations Dr. Drake has fully met in the first volume of his elaborate work. Without pretending to assert that it is as perfect as it might have been rendered, we take great pleasure in saying that it is a volume which, in our judgment, does honor, not only to its author, but to our country. Errors will be pointed out in it which future editions will not contain; and in time, upon the foundation which it has laid, other treatises marking the progress of medical science will appear; but the time will hardly come when it will not be quoted by writers on the diseases of America. Himself a pioneer, Dr. Drake is fortunate in having written a book which must remain long a guide to those who shall come after him in this field.

We have not room, at present, to particularize, but will merely add, that Dr. Drake has produced an original work. The contents of this volume are such as can be found in no other volume besides. In it he

has given to the profession the results of what he himself has seen and experienced, or what has been observed by others in the region to which his treatise relates; and as a record of original observations it is unrivaled by any work on medicine yet written in our country. There is no need that we should recommend such a work to our readers; they will be in haste to procure it, and to possess their minds of its rich scientific stores. Although but the first of two or three volumes, this volume is complete in itself and would not be less interesting or less valuable if the remainder should never appear. We are glad, however, to know that the indefatigable author is still industriously engaged upon the work, and that most of the materials for its consummation are already collected. Y.

MEETING OF THE AMERICAN MEDICAL ASSOCIATION, AT CINCINNATI.

This was one of the largest assemblages of delegates, that the objects of the Association have called together. It was perhaps excelled by the meeting in Boston.

Among the earliest duties of the Association was the election of officers. The Association confirmed the selections of the committee, appointed for this purpose. The following are the names of the officers, for the ensuing year:

President.—Dr. R. D. Mussey, of Cincinnati.

Vice Presidents.—Dr. J. B. Johnson, of Missouri, 1st; Dr. A. Lopez, of Alabama, 2d; Dr. D. Brainard, of Illinois, 3d; and Dr. G. W. Norris, of Pennsylvania, 4th.

Secretaries.—Dr. Alfred Stillé, of Pennsylvania; Dr. H. Desaussure, of South Carolina.

Treasurer.—Dr. Isaac Hays, of Pennsylvania.

We must reserve our remarks on the proceedings of the Association, for another number.

The Ohio Medical and Surgical Journal, complains that the *Western Journal* is not received in exchange. Why this is so, we cannot tell, for our Journal is regularly mailed for the Ohio Medical and Surgical Journal. The arrangements respecting the transmission of medical periodicals are as bad as they can well be. We often fail to receive at least one half of our exchanges, but we know of no way of remedying the evil.

DR. DOWLER ON DEATH.

Dr. Dowler, of New Orleans, has attracted some attention, this winter, by his papers on the vivisection of the Southern saurian. The experiments were repetitions of a suite previously performed by Professor Le Conti, of Georgia, who has recently reclaimed them. Dr. Dowler has made a satisfactory response, in the last number of the New Orleans Medical Journal, to the Professor's complaint. In a late number of the New Orleans Medical Journal, the editor announced that Dr. Dowler was then engaged on a paper that would be likely to create a sensation. Through the courtesy of Dr. Dowler, we have received a copy of the paper referred to, and we have read it with some degree of pleasure, but with less satisfaction than we anticipated. The paper is entitled, "Researches on the Natural History of Death," and it contains not only a review of the action of the French Academy on what is called the Manni prize, but Dr. Dowler's own experiments and deductions, on the test of death. In order to understand the subject, the reader must bear in mind, that in 1837, "Professor Manni, of the University of Rome, proposed a special prize of 1500 francs, to be awarded by the French Academy, for the best work upon the subject of apparent death; with the view of preventing premature interments."—This prize was carried off by M. Bouchut, and he divides "the certain signs of death into *immediate* and *remote*. The first consists in: 1. The prolonged absence of the signs of the heart; 2. The simultaneous relaxation of the sphincters; and, 3. The sinking of the globe of the eye, with loss of transparency of the cornea. The first of these alone, is regarded by the committee as conclusive. The remote signs are: 1. Cadaveric rigidity; 2. The absence of muscular contractility under the influence of galvanism; and, 3. Putrefaction."

The first of the *immediate* signs of death, thus laid down by M. Bouchut, "cannot," according to Dr. Dowler, "be a general test, because stethoscopists are rare, and in the best hands is often not attainable." This does not seem to us a valid objection; if the test offered by M. Bouchut is the best one, that gentleman, backed by the authority of the eminent body who were appointed to judge the case, is clearly entitled to the prize. That which is the surest test, may not always be the most easily reduced to practice, while that which is most attainable, may not be the best. Take, for example, Dr. Dowler's "improvement" on M. Bouchut's test—the use of thermometers. Dr. D. considers that

they afford a more unerring indication of the presence of death, than the absence of sounds in the heart. Would Dr. Dowler consider his own test fairly objected to, by the declaration that there were places where thermometers could not be readily obtained, and that they might fall into the hands of persons who did not know how to use them? This is precisely the character of Dr. Dowler's objection to M. Bouchut's test.

But again:—Dr. Dowler says: that the Academy and M. Bouchut are guilty of, what logicians call, *petitio principii*—"they take for granted what should be proved," and Dr. D. asks triumphantly: "Who has proved that the heart, like the pulse, like every other organ, may not fall into *temporary quiescence or inaction?*" Analogies are urged to show that the heart does fall into this condition, and saurian facts are referred to, which establish that a heart may act after it is cut out of the body: thus, an alligator's heart may be taken from his body and emptied of its blood; the alligator may then be roasted, the heart put back, and upon the application of the stethescope, "the dead will afford M. Bouchut's certain sign of life!"

With all due deference to Dr. Dowler, we think this is rather worse than what he charges on the French Academy and M. Bouchett—they only begged the question; Dr. Dowler changes its terms. M. Bouchut's test is founded on the *sounds* of the heart; Dr. Dowler undertakes to represent that it is based on the *movements* of the heart. The first sound of the heart may be admitted a muscular one, though we do not believe it, but about the second there can be no controversy—that is *valvular*, and may be produced by the passage of blood, or the constrained passage of air, moving both through the auricles and ventricles. Dr. Billing, in his admirable work on "The Principles of Medicine," shows that *both sounds are valvular;* Mr. Brakyn, of Trinity College, Dublin, has demonstrated the truth of Dr. Billing's views beyond all contradiction, and as these sounds are *valvular*, what force does Dr. Dowler find in his facts of muscular contraction in the exsected part? And how can he consider M. Bouchut and the French Academy antagonistic to his roasted alligator, and a heart emptied of its blood? Dr. Dowler does not invalidate the integrity of M. Bouchut's test, by his reasoning or assumptions. Mr. Brakyn represented recently that Dr. Stokes, of Dublin, had said he had "noticed in typhus fever, that patients, after the fever had progressed some time, and great debility had supervened; ceased to have any sound of the heart, though circulation continued. Sometimes, however, *the second continued*, the first being

absent," &c. But Dr. Stokes has made a reclamation in the London Lancet for April, and says:

"I have shown that in a few cases a returning impulse is perceptible before the development of the first sound; but the statement that the heart may act with considerable energy for days, without producing any sounds, is altogether opposed to fact."

In our judgment, M. Brachat, in an article inserted in the Gazette Médicale de Lyon, has made a more philosophical assault on M. Bouchut's "infallible sign," than this of Dr. Dowler's. M. Brachat establishes, very conclusively, we think, the following facts, and they are serious obstructions to the reception of M. Bouchut's chief test:

"The survival of the organic over the cerebral life, may be manifested in other ways than by the contractions of the heart. Hemorrhages have occurred, sweatings continued, and the beard sprouted, after the cessation of cerebral life; and from the fact of the capillary circulation sometimes thus continuing, M. Brachat believes that we may discover a sign of death at least as important as that derived from the auscultation of the heart's action. As long as this circulation continues, gangliona-ry death has not taken place, and there is a possibility of the organic life reacting on the suspended cerebral life, and restoring it. The means of acquiring a knowledge of whether the capillary circulation does thus continue, consists in pricking a part abounding in capillaries, as the lips or the tongue. A droplet of blood presents itself if the circulation persists, which is never the case when life is extinct. This has often been verified in cases of asphyxia and apoplexy. For the same reason, as long as boiling water produces phlyctenæ, and mustard excites the redness of the skin, life is not entirely extinct in the exhalants and capillaries.

"Thus the two lives may be separately extinguished; the one surviving a while the other, especially the ganglionary. The most enduring actions are the contractions of the heart, the capillary circulation, the secretion of the skin, the increase of the hair."

Dr. Dowler undertakes to commend the use of thermometers as a test, superior to any that have been named under the Manni prize. This test assumes that nothing is taken for granted, without the most indubitable proof. The axiom is declared, that "man, in his living state, maintains an uniform temperature, independent of the surrounding media, while a dead man, like other inert matter, has no independence of this

kind, but steadily responds to, and is governed by, calorific conditions altogether physical," &c.

We think Dr. Dowler assumes a great deal in this proposition. He begs the whole question with quite as much mendicity as the French Academy and M. Bouchut do. May we not ask Dr. D. his own question? "Who has proved that the heat-generating function may not fall into temporary quiescence or inaction," as well as the heart? We should like to hear this question answered.

Dr. D.'s paper has not been drawn up with the care it deserved. Passing over other blemishes, we venture to ask why Dr. Dowler permits himself to use such language as the following, which we find on page 20: "blood that *has underwent* refrigeration." Such things are spots upon the Doctor's reputation as a writer, and he should be more careful in future.

But we must bring these remarks to a close, although there are other portions of the Doctor's essay that require notice.

ST. LOUIS MEDICAL JOURNAL.

We inadvertantly omitted an acknowledgment of the revival of this work in our former number. It was suspended by the great fire in St. Louis, but we hope it may now go on rejoicing in strength and usefulness. The only change that has been made in the editorial department is in the substitution of the name of Dr. John B. Johnson, as one of the editors, in place of Dr. Joseph N. McDowell. We formed a very favorable opinion of the new editor during our attendance at the recent meeting of the National Association of Physicians.

SUMMER INSTRUCTION.

We invite attention to the card, on the cover of this Journal, of Drs. David W. Yandell & R. J. Breckenridge. These gentlemen offer an excellent opportunity to students, to enjoy bed-side clinics, and we advise those desirous of this species of improvement in sound medical knowledge, to commence with the beginning of the course in July.

INDEX TO VOL. V.

[THIRD SERIES.]

A

Abscesses in the brain....245
Abscesses, fistulous....497
A case of chronic pneumonia, by Dr. D. W. Yandell....312
Alabama, typhoid fever in....182
Albuminaria....192
Alcoholic extracts....275
American medical association....273
American surgery....179
Ancient medical literature....393
Anderson's case of purpura....470
Anemic and other affections, employment of manganese in....259
Annual of scientific discovery,....433
Anthrax, case of....423
Anus, treatment of fissures in....264
A practical treatise on diseases of children, by D. Francis Condie, M. D. 92
A professorial Thersites....453
Arsenical poisoning, Siliman's case of.... 49

B

Bandage, the in the treatment of fractures, ulcers, gunshot wounds hemorrhage, &c , &c., by T. S. Bell, M. D.... 93
Bandage, the in the treatment of fractures, &c....390
Baron Larrey's method of treating ulcers caused by congelation... 97
Bartlett. Prof. E. on the life, &c., of Wm. Charles Wells, M. D... 22
Bartlett's Prof. address.... 91
Bartlett Professor on edematous laryngitis....209
Baynton's method of treating ulcers 409
Beck's historical sketches of the state of medicine in the American colonies, &c....542
Beds for the sick....501
Bell on the bandage.... 93
Bell's T. S. remarks on the reports in the London Lancet on fractures, hemorrhages, &c....477
Bell's miscellaneous matters of practical medicine....500
Bell John on the bandage.... 99
Bell's John description of the mode of applying the bandage..139
Bigelow's introductory lecture....455
Brain, abscesses in....245
Brodie on dressing ulcers....422

C

Carbuncle, treatment of....424
Cases of Purpura.... 13
Cases at the Louisville hospital, by Dr. D. W. Yandell....241
Case of malignant tumor....448
Cholera, cause of....275
Clinical lectures....455
Coagula, fibrinous of the heart, Yandell Dr. D. W. on....369
Colleges in the U. S....270
Constitutional treatment of ulcers.421
Cornea, opacities of....443
Critchett on ulcers....399
Critchett on water dressings....417
Critchett on method of strapping ulcers 419
Cui Bono?.... 90
Cutler on the bandage.... 96
Cystic Oxide....196

D

Death, Dr. Dowler on....545
Demonstrative midwifery....459
Demonstrative midwifery....539
Descendants of Balaam's beast....397
Diabetes 189
Diet, in the cure of malignant tumor.448
Division of ulcers....402
Dowler on death....545
Drake's treatise....543
Dysentery, Sneed on.... 1
Dysentery and diarrhea of fever, treatment of....258

E

Edematous laryngitis, Professor Bartlett on....209
lesions 210
symptoms 213
causes 218
varieties & forms of 221
march, duration, and terminations 222
mortality and prognosis....223
diagnosis 223
theory 225
treatment....226
definition....237

Bartlett on history and bibliography 238
Emison's case of traumatic tetanus—recovery 317
"Enquirer" on the bandage 408
Epidemic dysentery, by Dr. Wm. C. Sneed 1
Epidemic puerperal peritonitis 461
Esophagus, extraction of foreign bodies from 262
Experiments on the use of salt 532
External hemorrhoids, treated by potassa fusa 268
Extracts, alcoholic 275
Eve's Prof. introductory lecture, notice of 366

F

Fever, typhoid in Alabama 182
Fever, typhus 258
Fibrinous coagula of the heart, Dr. D. W. Yandell on 369
Fissures of the anus, treatment of 264
Fistulous abscesses 497
Fracture of the skull, Swain's case of 473
Fractures, the London Lancet on 477

G

Gangrenous ulcer, remarks on by T. S. Bell 485
Gastritis, case of reported by Dr. D. W. Yandell 241
Gordon's case of rupture of the ilium and omentum 142
Gordon's lectures on water, with a number of cases 277

H

Haskins on the diagnostic value of the urine 185
Heart, coagula of Yandell on 369
Heberden on the bandage 407
Heister on the bandage 395
Heister on the bandage in fistulous cases 405
Heister on the bandage in fractures 406
Hemorrhage post-partum, fatal 300
Hemorrhoids, externally treated by potassa fusa 268
Hemorrhoids, new instrument for operating on 441
Hewett's case of malformation of the uterus, with fatal post-partum hemorrhage 300
Historical sketch of the state of medicine in the American colonies, &c. 542

I

Impropriety of frequent operative interference in midwifery 441
Inflammation of the urinary passages 200
Instruction, summer 548
Intestinal obstruction in the colon, operation for 505
Iodine, solution of in the treatment of nevus 262

J

Jenner on typhoid, typhus, and relapsing fever 535
Journal, St. Louis Medical 548

K

Kenney on epidemic puerperal peritonitis 461
Kentucky surgery 178
Laryngitis edematous, Prof. Bartlett on 209
Leucorrhea, new remedy for 442
Louisville marine hospital, cases at, reported by Dr. D. W. Yandell 241

M

Macartney on water dressings for ulcers 417
Maclise on the anatomical phenomena of fractures 133
Maclise on splints 134
Malignant tumor 448
Manganese in anemic and other affections 259
Medical men's per centage on prescriptions 181
Medical society of Montgomery county Tenn. 182
Medicine veterinary 458
Medical Journal, St. Louis 548
Meeting of the American medical association, at Cincinnati 544
Midwifery impropriety of frequent operative interference in 441
Midwifery, demonstrative 459
Morbus brightii 197
Mortality from injuries 102, 103

N

Nevus treated by solution of iodine 262
New instrument for operating in hemorhoids 441
New remedy for leucorrhea 442
Nitrate of silver in salivation 266
Nitrate of silver in lacerated wounds of the face, &c. 500

O

Obituary 276
O'Halleran on adhesive inflammation 106
On beds for the sick 501
On the identity or non-identity of typhoid fever, typhus fever, and relapsing fever 535
Opacities of the cornea 443
Opening made in the colon 505
Operative interference in midwifery 441
Oxalate of lime 195

P

Paré's ointment for gun-shot wounds 107
Pathological changes that follow section of the sciatic nerve 531
Per-centage on prescriptions 181
Pharmacy's society of premium ... 248
Philosophy of the bandage 124
Phosphatic deposits 194
Pirtle's case of complicated disease 320
Pneumonia, chronic — Yandell's case of 312
Poisoning by arsenic, a case reported by Prof. Silliman 49
Postage on scientific journals 183
Postponed items 366
Potassa fusa in the treatment of external hemorrhoids 268
Premium offered by the society of pharmacy of Paris 248
Purpura, case of by Dr. B. F. Wendell 13
Purpura, case of by Dr. N. B. Anderson 470
Purulent secretions, effects on the constitution 493
Remarkable complication of diseases, by Dr. C. Pirtle 320
Reviews—
A treatise on the diseases of the bones. By Edward Stanley, F. R. C. S., President of the royal college of surgeons of England, and surgeon of St. Bartholomew's hospital 58
The three kinds of cod liver oil. By L. J. de Jongh, M. D., of the Hague 86
A critical analysis of the review of Prof. B. W. Dudley's article on aneurism 144
Lectures on the diseases of infancy and childhood. By C. West, M. D., physician to the royal infirmary for children, &c. 163
On the diseases of children. By Fleetwood Churchill, M. D., M. R. I. A., hon. fellow of the college of physicians, Ireland, &c. 163
A practical treatise on the diseases of children. By D. Francis Condie, M. D., secretary of the college of physicians, &c 163
Principles of human physiology; with their chief applications to pathology, hygiene, and forensic medicine. By Wm. Carpenter, M. D., F. R. S. F. G. S., examiner in physiology in the university of London 168
The transactions of the American medical association, vol. 2. 174
The American Journal of Science and Arts. By Prof. B. Silliman, LL. D., M. D., &c., Prof. B. Silliman, Jr., A. M., M. D., &c., and James D. Dana, A. M. 252
Braithwaite's retrospect of practical medicine, and Rankin's half yearly abstract of the medical sciences 257
On the treatment of gun-shot wounds. By B. W. Dudley, M. D., professor of surgery in Transylvania university.
On the use of the bandage in gun-shot wounds, etc. By B. W. Dudley, M. D., professor of anatomy and surgery in Transylvania university 324
A theoretical and practical treatise on midwifery, including the diseases of pregnancy and parturition. By P. Cazeaux, adjunct professor in the faculty of medicine of Paris, etc., etc. 359
The annual of scientific discovery; or year book of facts in science and arts. Edited by David Wells, of the Lawrence scientific school, Cambridge, and George Bliss 365
A universal formulary. By R. Egle-feld Griffith, M. D. 428
A practical treatise on inflammation of the uterus and its appendages, and on ulceration and induration of the neck of the uterus. By James Henry Bennet, M. D., M. R. C. P., &c. 440
On the treatment of fractures, &c, by the use of the roller. By B. W. Dudley, M. D., professor of surgery in transylvania university 508
The diseases of females, including those of pregnancy and childbed. By Fleetwood Churchill, M. D., &c. 524
Surgical anatomy. Part 2. By Joseph Maclise 525
A treatise on baths, &c. By John Bell, M. D., &c. 527
Rupture of the ilium and omen-

tum. By F. H. Gordon, M. D. 142
S
Salivation treated by nitrate of silver 266
Salt, experiments on the use of.... 532
Sanitary reform 367
Sciatic nerve, regeneration of.... 531
Scientific journals, postage on.... 183
Silliman's case of arsenical poisoning 49
Silicic Acid 196
Sneed on epidemic dysentery.... 1
St. Louis Medical Journal..... 548
Summer instruction 548
Surgery, Kentucky 178
Surgery, American 179
Swain's remarkable case of fracture of the skull 473
T
Tables for assisting beginners in the diagnostic application of morbid urine 205, 208
Tetanus, traumatic case of..... 317
The bandage in its application to fractures, &c 92
The reviewer of Prof. Dudley's surgical essays 92
The reviewer of Prof. Dudley's essays 178
The diagnostic value of the urine. By E. B. Haskins, M. D..... 185
The history, diagnosis, and treatment of edematous laringitis. By Elisha Bartlett, M D., professor of the theory and practice of medicine in the university of Louisville 209
The position of the medical profession in society 366
The Louisville medical school.... 269
The cause of cholera 275
The history, diagnosis and treatment of fibrinous coagula of the heart. By D. W. Yandell, M. D.. 369
The bandage in the treatment of fractures, ulcers, gun-shot wounds, hemorrhage, &c., &c. By T. S. Bell, M. D..... 390
The causes of ulceration..... 399
The acute ulcer..... 403
The chronic ulcer..... 403
The irritable ulcer 404
The Buffalo Medical Journal..... 459
The London Lancet, on fractures, hemorrhages, and gangrenous ulcers 477
The Ohio Medical and Surgical Journal 544
Thersites, a professorial..... 453
Tilden & Co.'s alcoholic extracts. 275
Translation of the prog amme of the premium offered by the society of pharmacy, of Paris..... 248
Traumatic tetanus, case of, by Dr. Emison 317
Treatment of diarrhea and dysentery of fever..... 258
Treatment of fissures of the anus.. 264
Tumor malignant cured..... 448
Two lectures on water. By F. H Gordon, M. D..... 277
Typhoid fever in Alabama..... 182
Typhus fever..... 258
U
Ulcers, treatment of by the bandage..... 390
Ulcers, local applications..... 390
Ulcers, the bandage commended for, by the great lights of the profession..... 391
Ulcers, various methods of treating them..... 413, 414
Ulcers, old-should they be healed?. 422
Ulcers, gangrenous..... 485
Urea, uric acid, &c..... 194
Urinary sediments..... 193
Urine. diagnostic value of, by Dr. Haskins 185
Uterus, malformation of, morbid adhesion and partial osseous degeneration of the placenta..... 300
W
Walker's fumigation for ulcers.... 415
Water, two lectures on, by F. H. Gordon, M. D..... 277
Weissinger, G. W. obituary notice of..... 276
Wells, Wm. Charles sketch of the life and character of, by Prof. E. Bartlett, M. D..... 22
Wendel, B. F. Dr. on purpura.... 13
Wound of the brain 245
Y
Yandell's D. W. cases at the Louisville marine hospital..... 241
Yandell's, D. W. case of chronic pneumonia with anomalous physical signs..... 312
Yandell on the diagnosis and treatment of fibrinous coagula of the heart..... 36